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OM protein - protein search, using sw model

Run on: November 18, 2002, 15:56:57 : Search time 36 Seconds

(without alignments)
529.301 Million cell updates/sec

Title: US-09-284-100a-2_COPY_66_208

Sequence: 1 HVRSYNHLQGVRRKRLFSF.....GQTRRNKTSNHLPLWVHS 143

Scoring table:

BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Minimum number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :
1: /SID52/gcgdata/geneseq/geneseq-emb1/AA1980.DAT:*
2: /SID52/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:*
3: /SID52/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:*
4: /SID52/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:*
5: /SID52/gcgdata/geneseq/geneseq-emb1/AA1984.DAT:*
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9: /SID52/gcgdata/geneseq/geneseq-emb1/AA1988.DAT:*
10: /SID52/gcgdata/geneseq/geneseq-emb1/AA1989.DAT:*
11: /SID52/gcgdata/geneseq/geneseq-emb1/AA1990.DAT:*
12: /SID52/gcgdata/geneseq/geneseq-emb1/AA1991.DAT:*
13: /SID52/gcgdata/geneseq/geneseq-emb1/AA1992.DAT:*
14: /SID52/gcgdata/geneseq/geneseq-emb1/AA1993.DAT:*
15: /SID52/gcgdata/geneseq/geneseq-emb1/AA1994.DAT:*
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19: /SID52/gcgdata/geneseq/geneseq-emb1/AA1998.DAT:*
20: /SID52/gcgdata/geneseq/geneseq-emb1/AA1999.DAT:*
21: /SID52/gcgdata/geneseq/geneseq-emb1/AA2000.DAT:*
22: /SID52/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:*
23: /SID52/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	765	100.0	146	19	AAW52584
2	765	100.0	146	22	AAW52584
3	765	100.0	147	20	AAW52584
4	765	100.0	147	21	AAW52584
5	765	100.0	147	22	AAW52584
6	765	100.0	152	19	AAW52583
7	765	100.0	162	19	AAW52583
8	765	100.0	162	22	AAW52583
9	765	100.0	170	19	AAW52584
10	765	100.0	170	19	AAW52582

11	765	100.0	170	22	AAW52584
12	765	100.0	171	19	AAW52584
13	765	100.0	171	20	AAW52584
14	765	100.0	171	21	AAW52584
15	765	100.0	171	22	AAW52584
16	765	100.0	174	19	AAW52583
17	765	100.0	174	20	AAW52583
18	765	100.0	174	20	AAW52583
19	765	100.0	174	20	AAW52583
20	765	100.0	174	21	AAW52583
21	765	100.0	174	21	AAW52583
22	765	100.0	174	21	AAW52583
23	765	100.0	174	22	AAW52583
24	765	100.0	174	22	AAW52583
25	765	100.0	174	22	AAW52583
26	765	100.0	184	20	AAW52583
27	765	100.0	184	20	AAW52583
28	765	100.0	184	21	AAW52583
29	765	100.0	184	21	AAW52583
30	765	100.0	184	21	AAW52583
31	765	100.0	184	21	AAW52583
32	765	100.0	184	21	AAW52583
33	765	100.0	184	21	AAW52583
34	765	100.0	184	21	AAW52583
35	765	100.0	184	21	AAW52583
36	765	100.0	184	21	AAW52583
37	765	100.0	184	21	AAW52583
38	765	100.0	184	21	AAW52583
39	765	100.0	184	21	AAW52583
40	765	100.0	184	21	AAW52583
41	765	100.0	184	21	AAW52583
42	765	100.0	184	21	AAW52583
43	765	100.0	184	21	AAW52583
44	765	100.0	184	21	AAW52583
45	765	100.0	184	21	AAW52583

ALIGNMENTS

RESULT 1	AAW52584	standard; Protein; 146 AA.
ID	AAW52584	
AC	AAW52584	
DT	15-JUL-1998	(first entry)
DE	KGf-2 deletion mutant A63-S208.	
KW	Keratinocyte growth factor-2; KGf-2; fibroblast growth factor-12; FGF-12;	
KW	keratinocyte proliferation; growth stimulator; skin strength; mucositis;	
KW	epidermal thickening; wound healing; inflammatory bowel disease; therapy;	
KW	inflammation; hair growth promoter; muten.	
OS	Synthetic.	
OS	Homo sapiens.	
PN	WO9806844-A1.	
PD	19-FEB-1998.	
PF	13-AUG-1997;	97WO-US14112.
PR	28-FEB-1997;	97US-0039045.
PR	13-AUG-1996;	96US-0023852.
PA	(HUMA-) HUMAN GENOME SCI INC.	
PI	Coleman TA, Duan R, Jimenez P, Mendrick D, Moore PA;	
PI	Ni J, Kauppy MA, Ruben SM, Zhang J;	
DR	WPI; 1998-159536/14.	

Human KGf-2 deleti
KGf-2 mutant, KGf2
E.coli optimised K
Human KGf-2 mutant
KGf-2 mutant #5.
E.coli optimised K
E. coli optimised
E. coli optimised
Truncated E. coli
Human KGf-2 E. coli
Human KGf-2 E. coli
Human KGf-2 deleti
Escherichia coli o
Escherichia coli o
KGf-2 deletion con
E. coli optimised K
Human KGf-2 const
PQE60-Cys37 const
His rpf10 protein
Human KGf-2 deleti
Human fibroblast g
Recombinant kerati
Human keratinocyte
E. coli optimised K
Keratinocyte growt
Human keratinocyte
E. coli optimised
Human keratinocyte
Human fibroblast g
Human FGF-10 prote
Human fibroblast g
Human keratinocyte
Fibroblast growth
Human keratinocyte
Human KGf-2 E. col

XX Keratinocyte growth factor-2 deletion mutants - useful to promote
PT or accelerate wound healing

Claim 11; Page -: 251pp; English.

CC This sequence is a human keratinocyte growth factor-2 (KGF-2) deletion
CC mutant of the invention, that stimulates proliferation of keratinocytes.
CC The mutants have enhanced keratinocyte growth stimulating activity as
CC compared to wild-type KGF-2 (also known as fibroblast growth factor-12).
CC They are used to stimulate growth or proliferation of keratinocytes. In
CC particular, they are used to prevent or improve the appearance of
CC wrinkles or aged skin, improving skin strength, promoting epidermal
CC thickening, reducing scarring or improving healing after cosmetic
CC surgery. The mutants are also useful for promoting wound healing,
CC especially where an individual is wound healing impaired. Wounds to be
CC treated may be surgical or excisional wounds, deep wounds involving
CC damage of the dermis and epidermis, eye tissue wounds, dental tissue
CC wounds, oral cavity wounds, diabetic, dermal, cubitus, arterial or
CC venous stasis ulcers or burns. Treatment, especially by anastomosis, of
CC wounds caused by colonic or gastrointestinal surgical procedures can also
CC be achieved through use of the KGF-2 deletion mutants. They can also be
CC used for treatment or prevention of mucositis, inflammatory bowel
CC disease, reduction of inflammation, promoting hair growth, urothelial
CC healing or tissue growth or repair in the female genital tract, or for
CC treating tissue exposed to radiation or protecting tissue used to
CC to radiation (e.g. to allow an increase in radiation dosage used to
CC treat a malignancy). This sequence does not appear in the specification,
CC but was created from the wild type KGF-2 sequence shown in AAW52581.

XX Sequence 146 AA:

Query Match 100.0%; Score 765; DB 19; Length 146;
Best Local Similarity 100.0%; Pred. No. 1.3e-77;

Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSTNHLOGDVRRKLFSEFTKYFLKIEKNKVGSGTKKENCPSILEITVGEIVAAVKA 60
DB 4 HVRSTNHLOGDVRRKLFSEFTKYFLKIEKNKVGSGTKKENCPSILEITVGEIVAAVKA 63
QY 61 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNWQHGRMYVALNKGGA 120
DB 64 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNWQHGRMYVALNKGGA 123
QY 121 PRRGOKTRRKNNTSAHFLPMVYHS 143
DB 124 PRRGOKTRRKNNTSAHFLPMVYHS 146

DB 124 PRRGOKTRRKNNTSAHFLPMVYHS 146

SUPL 2
AAB60204
ID AAB60204 standard; Protein; 146 AA.

XX AAB60204;

XX 27-MAR-2001 (first entry)

DE Mutant human KGF-2, Ala 63-ser 208 (KGF-2 delta-28).

XX Human; keratinocyte growth factor-2; KGF-2; wound healing; vulnerary;
KW epithelial cell proliferation; epidermal keratinocyte proliferation;
KW soft tissue growth; ischaemic injury; skin disorder;
XX skin graft adherence; deletion mutant; mutain.

OS Homo sapiens.
OS Synthetic.

PN WO200072872-A1.

XX 07-DEC-2000.

XX 02-JUN-2000; 2000WO-US15186.

PR 02-JUN-1999; 99US-0137448.
PR 22-OCT-1999; 99US-0160913.

XX (HUMA-) HUMAN GENOME SCI INC.
PA (GENT/) GENTZ R L.
PA (CHOP/) CHOPRA A.
PA (KAUS/) KAUSHAL P.
PA (SPIT/) SPITZNAGEL T.
PA (UNSW/) UNSWORTH E.
PA (KHAN/) KHAN F.

XX Gentz RL, Chopra A, Kaushal P, Spitznagel T, Unsworth E, Khan F;
XX WPI; 2001-041105/05.

XX Pharmaceutical composition useful for stimulating epithelial cell
PT proliferation and basal keratinocytes for wound healing comprises
PT keratinocyte growth factor-2, in liquid or lyophilized forms -

Claim 67; Page -: 101pp; English.

XX The invention relates to a pharmaceutical composition comprising
CC 0.02-40 mg/ml (w/v) keratinocyte growth factor-2 (KGF-2) protein; a
CC buffer having buffering capacity of pH 5-8 at 5-50 mM; a diluent to
CC bring the composition to a designated volume; and a preservative such as
CC m-cresol, chlorobutanol, or a mixture of methyl paraben and propyl
CC paraben or their reaction products. The KGF-2 used in the composition of
CC the invention is preferably a novel mutant selected from the KGF-2
CC deletion mutants AAB60202 and AAB60204-860214, and particularly the
CC deletion mutant KGF-2 delta-33 (AAB60202). KGF-2 stimulates the
CC proliferation of epithelial cells and epidermal keratinocytes but not
CC mesenchymal cells such as fibroblasts. The compositions of the invention
CC may therefore be used for promoting or accelerating soft tissue growth or
CC wound healing, or for treating mucocytis or inflammatory bowel disease.
CC The compositions may be used to promote the healing of both superficial
CC and deep wounds, including those which involve damage of the dermis, and
CC is effective both in individuals with normal wound healing capacity, and
CC in those in whom healing is impaired (e.g., those with conditions such as
CC diabetes, infection, immunosuppression, malnutrition, and ischaemic
CC blockage or injury). The compositions may also be used to stimulate the
CC healing of eye tissue wounds, dental tissue wounds, oral cavity wounds,
CC vascular and dermal ulcers, burns, wounds associated with ischaemic
CC injury, and skin disorders such as psoriasis and epidermolysis bullosa.
CC The KGF-2 compositions may additionally be used to increase the adherence
CC of skin grafts to a wound bed, to stimulate re-epithelialisation from the
CC wound bed, and to reduce the side effects of gut toxicity that result
CC from radiation, chemotherapy treatments or viral infections. The
CC compositions of the invention are stable over prolonged periods of
CC storage, have increased KGF-2 pharmacological activity and/or facilitate
CC the application or administration of KGF-2 in therapeutic regimens. The
CC present sequence represents a specifically claimed human KGF-2 deletion
CC mutant.

XX Sequence 146 AA;

Query Match 100.0%; Score 765; DB 22; Length 146;
Best Local Similarity 100.0%; Pred. No. 1.3e-77;

Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSTNHLOGDVRRKLFSEFTKYFLKIEKNKVGSGTKKENCPSILEITVGEIVAAVKA 60
DB 4 HVRSTNHLOGDVRRKLFSEFTKYFLKIEKNKVGSGTKKENCPSILEITVGEIVAAVKA 63
QY 61 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNWQHGRMYVALNKGGA 120
DB 64 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNWQHGRMYVALNKGGA 123
QY 121 PRRGOKTRRKNNTSAHFLPMVYHS 143
DB 124 PRRGOKTRRKNNTSAHFLPMVYHS 146

RESULT 3

AAV32899
ID AAV32899 standard; Protein; 147 AA.
AC AAV32899;
XX
XX 03-NOV-1999 (first entry)
DT
XX
DE E. coli optimised human KGF-2 deletion mutant protein sequence.
XX
XX Keratinocyte growth factor; KGF-2; human; platelet; fibrinogen; albumin;
KM globulin; total serum protein; blood; hypofibrinogenaemia; cirrhosis;
KM disseminated intravascular coagulation; thrombocytopenia; myelofibrosis;
KM hypobulbinaemia; posttransfusion purpura; metastatic tumour; anaemia;
KM leukaemia; haemolytic syndrome; Zieve's syndrome; rheumatic lupus;
KM HELLP pre-eclampsia syndrome; congenital rubella syndrome; systemic lupus;
KM Epstein-Barr infectious mononucleosis; thyrotoxicosis; uraemia; therapy;
KM infection; tissue necrosis; vasculitis; ulcerative bowel disease;
KM serositis; subacute bacterial endocarditis; liver disease; amyloidosis;
KM congestive heart failure; constrictive pericarditis; nephrotic syndrome;
KM cardiac valvular disease; hypoglobulinaemia; keratoconjunctivitis sicca;
mucin.

OS Synthetic.
OS Homo sapiens.
OS Escherichia coli.
XX
XX MO9941282-A1.
XX
XX 19-AUG-1999.
PD
XX 12-FEB-1999; 99WO-US03018.
PF
XX 30-DEC-1998; 98US-0114387.
PR
XX 13-FEB-1998; 98US-0074585.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Jimenez P, Louie A, Mendrick D, Rampy MA, Russell D;
XX WPI: 1999-527359/44.
XX N-PSDB: AA211130.
XX
XX use of keratinocyte growth factor-2 to increase levels of platelets,
XX fibrinogen, albumin, globulin and total serum protein
XX
XX Example 11; Fig 13; 331pp; English.

XX This sequence represents a deletion mutant of E. coli optimised human
XX keratinocyte growth factor-2 (KGF-2). KGF-2 fragments and mutants are
XX used in the methods of the invention, for increasing the level of
XX platelets, fibrinogen, albumin, globulin, and total serum protein in the
XX blood. KGF-2 can also be used to stimulate proliferation of salivary
XX gland cells, lacrimal gland cells, sinus epithelium, and Goblet cells.
XX The methods can also be used to treat hypofibrinogenaemia caused by a
XX cirrhosis, and disseminated intravascular coagulation (DIC). The methods
XX can be used to treat thrombocytopenia and to alleviate hypobulbinaemia.
XX These diseases are caused by: drug induced hypersensitivity,
XX thrombocytopenia purpura, posttransfusion purpura, metastatic tumours in
XX the bone, aplastic anaemia, myelofibrosis, leukaemia, haemolytic
XX syndromes, cancer chemotherapy, Zieve's syndrome, sepsis, HELLP
XX pre-eclampsia, megaloblastic anaemia peritonitis, congenital
XX rubella syndrome, Epstein-Barr infectious mononucleosis, systemic lupus,
XX pre-eclampsia, thyrotoxicosis, uraemia, rheumatic diseases, granulomatous
XX processes, bacterial viral and parasitic infections, tissue necrosis,
XX vasculitis, ulcerative bowel disease, serositis, subacute bacterial
XX endocarditis, liver disease, amyloidosis, malnutrition, malignancy,
XX congestive heart failure, constrictive pericarditis, cardiac valvular
XX disease, nephrotic syndrome, trauma and crush injuries, gastrointestinal
XX and lymphatic fistulae, and protein-losing gastroenteropathies. The
XX methods can also be used to treat hypoglobulinaemia, total protein loss,
XX damage to the sinus epithelium, and can be used to increase proliferation
XX of epithelial cells of the bladder or prostate, stimulate proliferation
XX of the salivary gland cells and to increase Goblet cell proliferation for

CC treating or preventing keratoconjunctivitis sicca.
XX
XX SO Sequence 147 AA.
XX
XX Query Match 100.0%; Score 765; DB 20; Length 147;
XX Best Local Similarity 100.0%; Pred. No. 1,4e-77;
XX Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 HVR5YNNHLOGDVRMRKRLSPFKYFLKIKKNGKYSTCKKENCPSYLETTSVEIGVAVKA 60
XX DB 5 HVR5YNNHLOGDVRMRKRLSPFKYFLKIKKNGKYSTCKKENCPSYLETTSVEIGVAVKA 64
XX QY 61 INSNTYLLAMNKKGLYSGKEFNDDCKLERIEENGYNTYASFNMQHNGRQYVALNGKA 120
XX DB 65 INSNTYLLAMNKKGLYSGKEFNDDCKLERIEENGYNTYASFNMQHNGRQYVALNGKA 124
XX QY 121 PRRGQTRRKNTSAHFLPMVYHS 143
XX DB 125 PRRGQTRRKNTSAHFLPMVYHS 147

RESULT 4

AAAB10314
ID AAB10314 standard; Protein; 147 AA.
XX
XX AAB10314;
XX
XX 20-NOV-2000 (first entry)
DT
XX
XX Human KGF-2 deletion mutant DNA SEQ ID NO: 68.
DE
XX
XX Human; keratinocyte growth factor; KGF-2; antidiabetic;
XX antiinflammatory; cytoprotective; dermatological; gastrointestinal;
XX hepatic; respiratory; renal; cerebroprotective; mucositis; treatment;
XX epithelial cell proliferation; inflammatory bowel disease; lung damage;
XX liver disorder; diabetes; oral injury; gastrointestinal injury;
XX gut toxicity; gastric; duodenal; epidermolysis bullosa; skin graft;
XX skin disorder; renal failure; brain injury; intestinal fibrosis;
XX proctitis; female reproductive tract disorder; pulmonary fibrosis;
XX pneumonitis; pleural retraction; hemopoietic syndrome; myelotoxicity;
XX deletion mutant.
XX
XX Homo sapiens.
OS
XX US6077692-A.
XX
XX 20-JUN-2000.
PD
XX 13-FEB-1998; 98US-0023082.
PF
XX 13-AUG-1996; 96US-0023852.
PR 28-FEB-1997; 97US-0039045.
PR 13-AUG-1997; 97US-0055561.
PR 05-JUN-1995; 95US-0461195.
PR 14-FEB-1995; 95WO-US01790.
PR 23-MAY-1997; 97US-0862432.
PR 13-AUG-1997; 97US-0910875.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Mendrick D, Duan DR, Ni J, Jimenez P, Coleman TA, Gruber JR;
XX Dillon PJ, Gentz RL, Ruben SM, Zhang J, Moore PA, Rampy MA;
XX WPI: 2000-441307/38.
XX N-PSDB: AAAT1248.
XX
XX Novel keratinocyte growth factor useful for promoting and accelerating
XX wound healing, comprising at least 10 contiguous amino acids from a
XX specific amino acid sequence -
XX
XX Example 13; Fig 26; 190pp; English.
XX
XX This invention describes a novel human keratinocyte growth factor, KGF-2

CC (I), which has antiulcer, antidiabetic, antiinflammatory, cytoprotective,
 CC dermatological, gastrointestinal, hepatic, respiratory, renal and
 CC cerebroprotective activity. (I) is useful for stimulating epithelial cell
 CC proliferation in patients suffering from wound, mucositis, ulcer such as
 CC venous stasis ulcer, diabetic ulcer and cubital ulcer. (I) is also useful
 CC for treating inflammatory bowel disease, liver disorder, lung damage,
 CC diabetes, oral injury, gastrointestinal injury, gut toxicity, gastric
 CC ulcer, duodenal ulcer, epidermolysis bullosa, skin graft, skin disorder,
 CC renal failure, brain injury, breast tissue injury, urothelial damage,
 CC female reproductive tract disorder, intestinal fibrosis, proctitis,
 CC pulmonary fibrosis, pneumonitis, pleural retraction, hemopoietic syndrome
 CC and myelotoxicity. (I) is also useful for increasing the adherence of
 CC skin grafts to wound beds and to stimulate re-epithelialization from the
 CC wound bed, to produce changes in hepatocyte proliferation, to reduce the
 CC side effects of gut toxicity, to regenerate skin in full and partial
 CC thickness skin defects, and to prevent and heal damage to lungs. KGF-2
 CC shows enhanced activity, increased stability, higher yield and better
 CC solubility. This sequence represents a human KGF-2 protein deletion
 CC mutant described in the method of the invention.

XX Sequence 147 AA:

Query Match 100.0%; Score 765; DB 21; Length 147;
 Best Local Similarity 100.0%; Pred. No. 1.4e-77;
 Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 HVRSYNHLOGDVNRKLFSTKYELKIEKNGVSGTKKENCPSILITTSVEIGVAVKA 60
 DB 5 HVRSYNHLOGDVNRKLFSTKYELKIEKNGVSGTKKENCPSILITTSVEIGVAVKA 64

OY 61 INSNYILAMNRKKGKLYSGKEFNNDCKLERIEENGNTYASFNQHGROMYVALNGKA 120
 DB 65 INSNYILAMNRKKGKLYSGKEFNNDCKLERIEENGNTYASFNQHGROMYVALNGKA 124

OY 121 PRGQKTRRKNTSAHFLPMVYHS 143
 DB 125 PRGQKTRRKNTSAHFLPMVYHS 147

RESULT 5
 AAB61678
 ID AAB61678 standard; Protein: 147 AA.

AC AAB61678;
 XX
 DT 10-APR-2001 (first entry)
 XX

DE KGF-2 deletion construct #2.

KM keratinocyte growth factor; KGF-2; epithelial cell proliferation; wound;
 KM mucositis; ulcer; inflammatory bowel disease; liver disorder;
 KM lung damage; diabetes; oral injury; gastrointestinal injury;
 KM epidermolysis bullosa; renal failure; brain injury; proctitis;
 KM pulmonary fibrosis; haemopoietic syndrome; ovary injury; infertility;
 XX liver fibrosis.

XX Unidentified.

XX OS

XX PN WO200102433-A1.

XX PD 11-JAN-2001.

PF 03-JUL-2000; 2000WO-US18328.

XX 02-JUL-1999; 99US-0142343.

XX 14-JUL-1999; 99US-0143648.

XX 15-JUL-1999; 99US-0144024.

XX 12-AUG-1999; 99US-0148628.

XX 19-AUG-1999; 99US-0149935.

XX 03-NOV-1999; 99US-0163375.

XX 22-DEC-1999; 99US-0171677.

XX 19-APR-2000; 2000US-0198322.

XX 19-MAY-2000; 2000US-0203417.

PR 30-JUN-2000; 2000US-9911224.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Ruben SM, Jimenez P, Duan DR, Rampy MA, Mendrick D, Zhang J;
 XX Ni J, Moore PA, Coleman TA, Gruber JR, Dillon PJ, Gentz RL;
 XX WPI: 2001-071578/08.
 DR N-FSDB; AAF31946.

XX A polynucleotide encoding the human keratinocyte growth factor useful
 XX for stimulating epithelial cell proliferation in a patients that has
 XX e.g a wound -

XX Example 13; Fig 26; 591pp; English.

XX The present invention relates to human keratinocyte growth factor (KGF-2;
 CC see AAF31901 and AAB61657). The present sequence is a KGF-2 construct
 CC protein, which was generated in the present invention. KGF-2 can be used
 CC to stimulate epithelial cell proliferation in a patient, where the
 CC patient has a wound, mucositis, an ulcer, inflammatory bowel disease,
 CC liver disorder, lung damage, diabetes, oral injury, gastrointestinal
 CC injury, gut toxicity, epidermolysis bullosa, skin graft, skin disorder,
 CC renal failure, brain injury, breast tissue injury, urothelial damage,
 CC female reproductive tract disorder, intestinal fibrosis, proctitis,
 CC pulmonary fibrosis, pneumonitis, pleural retraction, haemopoietic
 CC syndrome, and myelotoxicity. In addition, KGF-2 can be used in the
 CC treatment or prevention of ovary injury, infertility, or fibrosis of the
 CC liver. KGF-2 also promotes internal healing, donor site healing, internal
 CC cosmetic surgery in a patient.

XX Sequence 147 AA:

Query Match 100.0%; Score 765; DB 22; Length 147;
 Best Local Similarity 100.0%; Pred. No. 1.4e-77;
 Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 HVRSYNHLOGDVNRKLFSTKYELKIEKNGVSGTKKENCPSILITTSVEIGVAVKA 60
 DB 5 HVRSYNHLOGDVNRKLFSTKYELKIEKNGVSGTKKENCPSILITTSVEIGVAVKA 64

OY 61 INSNYILAMNRKKGKLYSGKEFNNDCKLERIEENGNTYASFNQHGROMYVALNGKA 120
 DB 65 INSNYILAMNRKKGKLYSGKEFNNDCKLERIEENGNTYASFNQHGROMYVALNGKA 124

OY 121 PRGQKTRRKNTSAHFLPMVYHS 143
 DB 125 PRGQKTRRKNTSAHFLPMVYHS 147

RESULT 6
 AAW57312
 ID AAW57312 standard; Protein: 152 AA.

XX AAW57312;

XX 02-SEP-1998 (first entry)

XX Human KGF-2 protein dn20 hFCF10 sequence.

KM keratinocyte growth factor-2; KGF-2; variant; human; recombinant;
 KM epithelial cell stimulation; burn; ulcer; inflammatory bowel disease;
 KM lung damage; liver damage; pancreatic disorder; diabetes.

XX Homo sapiens.

XX OS

XX PN WO9816642-A1.

XX 23-APR-1998.

XX 15-OCT-1997; 97WO-US18607.

PR 11-DEC-1996; 960S-0033046.
PR 15-OCT-1996; 960S-0028493.
PR 06-DEC-1996; 960S-0032781.

XX (AMGE-) AMGEN INC.

PI Marli LO, Osslund TD;

DR WPI; 1998-251289/22.

DR N-PSDB; AAV289955.

XX New keratinocyte factor-2 variants - used for stimulating epithelial
PT cells for treating e.g. burns, ulcers, inflammatory bowel disease,
PT lung damage, liver damage or pancreatic disorders.

XX Example 1; Fig 3-3A; 132pp; English.

XX This represents a human keratinocyte growth factor (KGF)-2 protein
CC dM20 hKGF10. The specification provides variants of mature KGF-2 shown
CC in AAM57265 to AAM57271 and AAM57305 to AAM57311. A prokaryotic or
CC eukaryotic host cell containing a vector comprising a polynucleotide
CC encoding the KGF-2 variant operatively linked to an expression control
CC sequence can be used to produce the variants of KGF-2 by recombinant DNA
CC techniques. The KGF-2 variants and derivatives can be used for the
CC stimulation (including cytoprotection, proliferation and
CC differentiation), of epithelial cells including the eye, ear, gums, hair,
CC lung, skin, pancreas (endocrine and exocrine), thymus, thyroid, urinary
CC bladder, liver and gastrointestinal tract. They can be used for treating
CC e.g. burns and other partial and full-thickness injuries in need of
CC stimulation of adnexal structures such as hair follicles, sweat glands,
CC and sebaceous glands. They are also useful for the treatment of lesions
CC caused by epidermolysis bullosa, chemotherapy-induced alopecia and
CC male-pattern baldness, gastric and duodenal ulcers, gut toxicity,
CC inflammatory bowel diseases and erosions of the gastrointestinal tract.
CC They are useful in the treatment of chemotherapy induced pulmonary
CC fibrosis, damage caused by viral hepatitis, lung injury, gum disease,
CC salivary gland tissue damage, ear drum damage, autoimmune diseases such
CC as Sjogren's syndrome and pancreatic disorders including diabetes (Type I
CC and Type II) and cystic fibrosis.

XX Sequence 152 AA:

Query Match 100.0%; Score 765; DB 19; Length 152;
Best Local Similarity 100.0%; Pred. No. 1.4e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNHQGVNRMRKLFSTFKYFLKIEKNGKVSCTKENCPSYLETTSVEIGVAVKA 60

10 HVRSYNHQGVNRMRKLFSTFKYFLKIEKNGKVSCTKENCPSYLETTSVEIGVAVKA 69

61 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMQHNGRMYVALNGKA 120

70 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMQHNGRMYVALNGKA 129

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

130 PRGOKTRRKNTSAHFLPMVYHS 152

XX Synthetic.
OS Homo sapiens.
XX WO9806844-A1.

XX 19-FEB-1998.

XX 13-AUG-1997; 97WO-US14112.

XX 28-FEB-1997; 97US-0039045.

XX 13-AUG-1996; 96US-0023852.

XX (HUMA-) HUMAN GENOME SCT INC.

XX Coleman TA, Duan R, Jimenez P, Mendrick D, Moore PA;

XX Ni J, Ramphy MA, Ruben SM, Zhang J;

XX WPI; 1998-159536/14.

XX Claim 11; Page -; 251pp; English.

XX This sequence is a human keratinocyte growth factor-2 (KGF-2) deletion

XX mutant of the invention, that stimulates proliferation of keratinocytes.

XX The mutants have enhanced keratinocyte growth stimulating activity as

XX compared to wild-type KGF-2 (also known as fibroblast growth factor-12).

XX They are used to stimulate growth or proliferation of keratinocytes. In

XX particular, they are used to prevent or improve the appearance of

XX wrinkles or aged skin, improving skin strength, promoting epidermal

XX thickening, reducing scarring or improving wound healing after cosmetic

XX surgery. The mutants are also useful for promoting wound healing, wounds to be

XX especially where an individual is wound healing impaired. Wounds to be

XX treated may be surgical or excisional wounds, deep wounds involving

XX damage of the dermis and epidermis, eye tissue wounds, dental tissue

XX wounds, oral cavity wounds, diabetic, dermal, cubitus, arterial or

XX venous stasis ulcers or burns. Treatment, especially by anastomosis, of

XX wounds caused by colonic or gastrointestinal surgical procedures can also be

XX achieved through use of the KGF-2 deletion mutants. They can also be

XX used for treatment or prevention of mucositis, inflammatory bowel

XX disease, reduction of inflammation, promoting hair growth, uterine

XX healing or tissue growth or repair in the female genital tract, or for

XX treating tissue exposed to radiation or protecting tissue to be exposed

XX to radiation (e.g. to allow an increase in radiation dosage used to

XX treat a malignancy). This sequence does not appear in the specification,

XX but was created from the wild type KGF-2 sequence shown in AAM52581.

XX Sequence 162 AA:

QY 1 HVRSYNHQGVNRMRKLFSTFKYFLKIEKNGKVSCTKENCPSYLETTSVEIGVAVKA 60

20 HVRSYNHQGVNRMRKLFSTFKYFLKIEKNGKVSCTKENCPSYLETTSVEIGVAVKA 79

61 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMQHNGRMYVALNGKA 120

80 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMQHNGRMYVALNGKA 139

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

QY 121 PRGOKTRRKNTSAHFLPMVYHS 143

140 PRGOKTRRKNTSAHFLPMVYHS 162

DB 121 PRGOKTRRKNTSAHFLPMVYHS 143

XX 27-MAR-2001 (first entry)
 DT XX
 XX Human KGF-2 deletion mutant, Pro 47-Ser 208 KGF-2.
 DE XX
 XX Human: keratinocyte growth factor-2; KGF-2; wound healing; vulnery;
 KM epithelial cell proliferation; epidermal keratinocyte proliferation;
 KM soft tissue growth; ischemic injury; skin disorder;
 KM skin graft adherence; deletion mutant; muteln.
 OS
 OS Homo sapiens.
 XX Synthetic.
 XX WO200072872-A1.
 XX
 XX 07-DEC-2000.
 PD XX
 XX 02-JUN-2000; 2000MO-US15186.
 PF XX
 XX 02-JUN-1999; 99US-0137448.
 XX 22-OCT-1999; 99US-0160913.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA (GENTZ) GENTZ R L.
 PA (CHOP/) CHOPRA A.
 PA (KAUS/) KAUSHAL P.
 PA (SPIT/) SPITZNAGEL T.
 PA (UNSW/) UNSWORTH E.
 PA (KHAN/) KHAN F.
 XX
 XX Gentz RL, Chopra A, Kaushal P, Spitznagel T, Unsworth E, Khan F;
 PI WPI: 2001-041105/05.
 DR XX
 XX Pharmaceutical composition useful for stimulating epithelial cell
 PT proliferation and basal keratinocytes for wound healing comprises
 PT keratinocyte growth factor-2, in liquid or lyophilized forms -
 XX
 PS Claim 69; Page -: 101pp; English.

The invention relates to a pharmaceutical composition comprising
 0.02-40 mg/ml (w/v) keratinocyte growth factor-2 (KGF-2) protein; a
 buffer having buffering capacity of pH 5-8 at 5-50 mM; a diluent to
 bring the composition to a designated volume; and a preservative such as
 m-cresol, chlorobutanol, or a mixture of methyl paraben and propyl
 parabens or their reaction products. The KGF-2 used in the composition of
 the invention is preferably a novel mutant selected from the KGF-2
 deletion mutants AAB60202 and AAB60204-B60214, and particularly the
 deletion mutant KGF-2 delta-33 (AAB60202). KGF-2 stimulates the
 proliferation of epithelial cells and epidermal keratinocytes but not
 mesenchymal cells such as fibroblasts. The compositions of the invention
 may therefore be used for promoting or accelerating soft tissue growth or
 wound healing, or for treating mucocysts or inflammatory bowel disease.
 The compositions may be used to promote the healing of both superficial
 and deep wounds, including those which involve damage of the dermis, and
 is effective both in individuals with normal wound healing capacity, and
 in those in whom healing is impaired (e.g., those with conditions such as
 diabetes, infection, immunosuppression, malnutrition, and ischemic
 blockage or injury). The compositions may also be used to stimulate the
 healing of eye tissue wounds, dental tissue wounds, oral cavity wounds,
 vascular and dermal ulcers, burns, wounds associated with ischemic
 injury, and skin disorders such as psoriasis and epidermolysis bullosa.
 The KGF-2 compositions may additionally be used to increase the adherence
 of skin grafts to a wound bed, to stimulate re-epithelialisation from the
 wound bed, and to reduce the side effects of gut toxicity that result
 from radiation, chemotherapy treatments or viral infections. The
 compositions of the invention are stable over prolonged periods of
 storage, have increased KGF-2 pharmacological activity and/or facilitate
 the application or administration of KGF-2 in therapeutic regimens. The
 present sequence represents a specifically claimed human KGF-2 deletion
 mutant.

Sequence 162 AA;

Query Match 100.0%; Score 765; DB 22; Length 162;
 Best local Similarity 100.0%; Pred. No. 1,5e-77;
 Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 HVRSYNHLDGDMRMRKLESTFKYFLKIEKNKSGTCKENCPYSILLETTSYGVAVKA 60
 DB 20 HVRSYNHLDGDMRMRKLESTFKYFLKIEKNKSGTCKENCPYSILLETTSYGVAVKA 79
 OY 61 INSNTYLLAMNKKGKLYGSEKFNENCKLKERLENGYNTYASFNQHGROMYVALNKGKA 120
 DB 80 INSNTYLLAMNKKGKLYGSEKFNENCKLKERLENGYNTYASFNQHGROMYVALNKGKA 139
 OY 121 PRGCKTRRKNTSAHFLEPMVVS 143
 DB 140 PRGCKTRRKNTSAHFLEPMVVS 162
 RESULT 9
 ID AAM59054 standard; Protein; 170 AA.
 AC AAM59054;
 DT 26-AUG-1998 (first entry)
 XX
 XX Human hFGF10 protein.
 DE XX
 XX Keratinocyte growth factor-2; KGF-2; epithelial cell production;
 KW hepatitic cirrhosis; fulminant liver failure; gastric ulcer; diabetes;
 KW duodenal ulcer; gut toxicity; inflammatory bowel disease; oesophagitis;
 KW erosive gastritis; oesophageal reflux; gastrointestinal toxicity; human;
 KW pancreatitis; cystic fibrosis; corneal degeneration; gum disease;
 KW urinary bladder damage; ear drum damage; salivary gland damage;
 KW autoimmune disease; Sjogren's Syndrome; sicca syndrome; hFGF10;
 KW fibroblast growth factor.
 XX
 OS Homo sapiens.
 XX
 XX WO9816243-A1.
 XX
 XX 23-APR-1998.
 PD XX
 XX 15-OCT-1997; 97WO-US18667.
 PF XX
 XX 10-DEC-1996; 96US-0033457.
 PR 15-OCT-1996; 96US-0028495.
 PR 06-DEC-1996; 96US-0032253.
 XX
 XX (AMGE-) AMGEN INC.
 PA
 XX
 XX Danilenko DM, Farrell CL, Lacey DL, Ulrich TR;
 PI WPI: 1998-251052/22.
 DR N-PSDB: AAV11787.
 XX
 XX Stimulating production of epithelial cell(s), e.g. cells in oral
 PT cavity - comprises administering keratinocyte growth factor-2
 PT protein, useful for, e.g. treating fulminant liver failure or
 PT hepatic cirrhosis
 XX
 XX Example 1; Fig 3-3A; 97pp; English.
 PS
 XX This represents a human fibroblast growth factor hFGF10. The
 CC invention provides a method to stimulate the production of epithelial
 CC cells selected from cells within the eye, ear, gums, pancreas, urinary
 CC bladder, liver and gastrointestinal tract, especially cells in the oral
 CC cavity, glandular stomach and small intestine, colon and other cells
 CC within the intestinal mucosa. The method comprises contacting the cells
 CC with a keratinocyte growth factor-2 (KGF-2) protein. The KGF-2 proteins
 CC can be used to increase cytoprotection, proliferation or differentiation
 CC of epithelial cells. They can be used to treat and prevent hepatic
 CC cirrhosis, fulminant liver failure, damage caused by acute viral

CC hepatitis, toxic insults to the liver and bile duct disorders. They can
CC also be used to treat and prevent gastric ulcers, duodenal ulcers,
CC inflammatory bowel disease, gut toxicity and erosions of the
CC gastrointestinal tract, erosive gastritis, oesophagitis, oesophageal
CC reflux, radiation or chemotherapy induced gastrointestinal toxicity,
CC disorders of the pancreas, e.g. diabetes, pancreatitis or cystic
CC fibrosis, corneal degeneration, gum disease, urinary bladder damage,
CC cardiac damage, salivary gland damage and autoimmune diseases such as
CC Sjogren's Syndrome which can cause salivary gland insufficiency (sicca
CC syndrome).
XX
S0 Sequence 170 AA:
Query Match 100.0%; Score 765; DB 19; Length 170;
Best Local Similarity 100.0%; Pred. No. 1.6e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HVRSYNHLGGVWRKLFSTKYFLKIEKNGKVGSTKKEKNCYSILETTSVEIGVAVKA 60
28 HVRSYNHLGGVWRKLFSTKYFLKIEKNGKVGSTKKEKNCYSILETTSVEIGVAVKA 87
DB 61 INSRYLLAMNKKGLYSGKEFNNDCKLERIEENGYNTYASFNMQHNGROMYVALNGKA 120
88 INSRYLLAMNKKGLYSGKEFNNDCKLERIEENGYNTYASFNMQHNGROMYVALNGKA 147
QY 121 PRGQKTRRKNTSAHFLPMVYHS 143
148 PRGQKTRRKNTSAHFLPMVYHS 170
DB
RESULT 10
AAM52582
ID AAM52582 standard; Protein; 170 AA.
XX
AC AAM52582;
XX
DT 15-JUL-1998 (first entry)
XX
DE KGF-2 deletion mutant A39-S208.
XX
KW Keratinocyte growth factor-2; KGF-2; fibroblast growth factor-12; FGF-12;
KW keratinocyte proliferation; growth stimulator; skin strength; mucostasis;
KW epidermal thickening; wound healing; inflammatory bowel disease; therapy;
KW inflammation; hair growth promoter; mutain.
XX
OS Synthetic.
OS Homo sapiens.
XX
WO9806844-A1.
XX
19-FEB-1998.
XX
13-AUG-1997; 97WO-US14112.
XX
28-FEB-1997; 97US-0039045.
XX
13-AUG-1996; 96US-0023852.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Coleman TA, Duan R, Jimenez P, Mendrick D, Moore PA;
PI Ni J, Rampy MA, Ruben SM, Zhang J;
XX
DR WPI; 1998-159536/14.
XX
PT Keratinocyte growth factor-2 deletion mutants - useful to promote
PT or accelerate wound healing
XX
PS Claim 11; Page -: 251pp; English.
XX
CC This sequence is a human keratinocyte growth factor-2 (KGF-2) deletion
CC mutant of the invention, that stimulates proliferation of keratinocytes.
CC The mutants have enhanced keratinocyte growth stimulating activity as
CC compared to wild-type KGF-2 (also known as fibroblast growth factor-12).

CC They are used to stimulate growth or proliferation of keratinocytes. In
CC particular, they are used to prevent or improve the appearance of
CC wrinkles or aged skin, improving skin strength, promoting epidermal
CC thickening, reducing scarring or improving healing after cosmetic
CC surgery. The mutants are also useful for promoting wound healing,
CC especially where an individual is wound healing impaired. Wounds to be
CC treated may be surgical or excisional wounds, deep wounds involving
CC damage of the dermis and epidermis, eye tissue wounds, dental tissue
CC wounds, oral cavity wounds, diabetic, dermal, cubitus, arterial or
CC venous stasis ulcers or burns. Treatment, especially by anastomosis, of
CC wounds caused by colonic or gastrointestinal surgical procedures can also
CC be achieved through use of the KGF-2 deletion mutants. They can also be
CC used for treatment or prevention of mucositis, inflammatory bowel
CC disease, reduction of inflammation, promoting hair growth, urothelial
CC healing or tissue growth or repair in the female genital tract, or for
CC treating tissue exposed to radiation or protecting tissue to be exposed
CC to radiation (e.g. to allow an increase in radiation dosage used to
CC treat a malignancy). This sequence does not appear in the specification,
CC but was created from the wild type KGF-2 sequence shown in AAM52581.
XX
S0 Sequence 170 AA:
Query Match 100.0%; Score 765; DB 19; Length 170;
Best Local Similarity 100.0%; Pred. No. 1.6e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HVRSYNHLGGVWRKLFSTKYFLKIEKNGKVGSTKKEKNCYSILETTSVEIGVAVKA 60
28 HVRSYNHLGGVWRKLFSTKYFLKIEKNGKVGSTKKEKNCYSILETTSVEIGVAVKA 87
DB 61 INSRYLLAMNKKGLYSGKEFNNDCKLERIEENGYNTYASFNMQHNGROMYVALNGKA 120
88 INSRYLLAMNKKGLYSGKEFNNDCKLERIEENGYNTYASFNMQHNGROMYVALNGKA 147
QY 121 PRGQKTRRKNTSAHFLPMVYHS 143
148 PRGQKTRRKNTSAHFLPMVYHS 170
DB
RESULT 11
AAB60206
ID AAB60206 standard; Protein; 170 AA.
XX
AC AAB60206;
XX
DT 27-MAR-2001 (first entry)
XX
DE Human KGF-2 deletion mutant, Ala 39-Ser 208 KGF-2.
XX
KW Human; keratinocyte growth factor-2; KGF-2; wound healing; vulnery;
KW epithelial cell proliferation; epidermal keratinocyte proliferation;
KW soft tissue growth; ischaemic injury; skin disorder;
KW skin graft adherence; deletion mutant; mutain.
XX
OS Homo sapiens.
OS Synthetic.
XX
WO200072872-A1.
XX
PD 07-DEC-2000.
XX
XX 02-JUN-2000; 2000WO-US15186.
XX
PF 02-JUN-1999; 99US-0137448.
XX
PR 22-OCT-1999; 99US-0160913.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PA (GENT/) GENTZ R L.
XX
PA (CHOP/) CHOPRA A.
XX
PA (KAUS/) KAUSHAL P.
XX
PA (SPIT/) SPITZNAGEL T.
XX
PA (UNSW/) UNSWORTH E.
XX
PA (KHAN/) KHAN F.

AAV32908
ID AAV32908 standard; Protein: 171 AA.
XX
AC AAV32908;
DT 03-NOV-1999 (first entry)
XX
XX
DE E.coli optimised KGF-2 mutant KGF-2delta4.
XX
KM keratinocyte growth factor: KGF-2; human; platelet; fibrinogen; albumin;
KM globulin; total serum protein; blood; hypofibrinogenemia; cirrhosis;
KM disseminated intravascular coagulation; thrombocytopenia; myelofibrosis;
KM hypobulbinaemia; posttransfusion purpura; metastatic tumour; anaemia;
KM leukaemia; haemolytic syndrome; Zieve's syndrome; rheumatic disease;
KM HELLP pre-eclampsia syndrome; congenital rubella syndrome; systemic lupus;
KM Epstein-Barr infectious mononucleosis; thyrotoxicosis; uraemia; therapy;
KM infection; tissue necrosis; vasculitis; ulcerative bowel disease;
KM serositis; subacute bacterial endocarditis; liver disease; amyloidosis;
KM congestive heart failure; constrictive pericarditis; nephrotic syndrome;
KM cardiac valvular disease; hypoglobulinaemia; keratoconjunctivitis sicca;
mucin.
OS Synthetic.
OS Homo sapiens.
OS Escherichia coli.
XX
XX WC9941282-A1.
XX
PD 19-AUG-1999.
XX
PF 12-FEB-1999; 99MO-US03018.
XX
PR 30-DEC-1998; 98US-0114387.
PR 13-FEB-1998; 98US-0074585.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PA Jimenez P, Louie A, Mendrick D, Rampy MA, Russell D;
PI WPI: 1999-527359/44.
DR N-PSDB; AA211161.
XX
PT Use of keratinocyte growth factor-2 to increase levels of platelets,
XX fibrinogen, albumin, globulin and total serum protein
XX
XX Example 14; Page 132; 331pp; English.
XX
XX This sequence represents a deletion mutant of E. coli optimised human
XX keratinocyte growth factor-2 (KGF-2). KGF-2 fragments and mutants are
XX used in the methods of the invention, for increasing the level of
XX platelets, fibrinogen, albumin, globulin, and total serum protein in the
XX blood. KGF-2 can also be used to stimulate proliferation of salivary
XX gland cells, lacrimal gland cells, sinus epithelium, and Goblet cells.
XX The methods can also be used to treat hypofibrinogenemia caused by a
XX cirrhosis, and disseminated intravascular coagulation (DIC). The methods
XX can be used to treat thrombocytopenia and to alleviate hypobulbinaemia.
XX These diseases are caused by: drug induced hypersensitivity,
XX thrombocytopenia purpura, posttransfusion purpura, metastatic tumours in
XX the bone, aplastic anaemia, myelofibrosis, leukaemia, haemolytic
XX syndromes, cancer chemotherapy, Zieve's syndrome, sepsis, HELLP
XX pre-eclampsia syndrome, megaloblastic anaemia peritonitis, congenital
XX rubella syndrome, Epstein-Barr infectious mononucleosis, systemic lupus,
XX pre-eclampsia, thyrotoxicosis, uraemia, rheumatic diseases, granulomatous
XX processes, bacterial viral and parasitic infections, tissue necrosis,
XX vasculitis, ulcerative bowel disease, serositis, subacute bacterial
XX endocarditis, liver disease, amyloidosis, malnutrition, malignancy,
XX congestive heart failure, constrictive pericarditis, cardiac valvular
XX disease, nephrotic syndrome, trauma and crush injuries, gastrointestinal
XX and lymphatic fistulae, and protein-losing gastroenteropathies. The
XX methods can also be used to treat hypoglobulinaemia, total protein loss,
XX damage to the sinus epithelium, and can be used to increase proliferation
XX of epithelial cells of the bladder or prostate, stimulate proliferation
XX of the salivary gland cells and to increase Goblet cell proliferation for

CC treating or preventing keratoconjunctivitis sicca.
XX
XX Sequence 171 AA:
SQ
Query Match 100.0%; Score 765; DB 20; Length 171;
Best Local Similarity 100.0%; Pred. No. 1,7e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HRSVNHLOGDVRWMLKPSFTKFKLEKNGKVSQTKKENCPSILETTSVEIGVAVKA 60
DB 29 IHNKSNHLOGDVRWMLKPSFTKFKLEKNGKVSQTKKENCPSILETTSVEIGVAVKA 88
QY 61 INSNVYLANMKKGLYGSKEFNNDCKLERIEENGYNTYASFNMQHGROMYVALNKGKA 120
DB 89 INSNVYLANMKKGLYGSKEFNNDCKLERIEENGYNTYASFNMQHGROMYVALNKGKA 148
QY 121 PRRGQTRRRKNTSAHFLPMVYHS 143
DB 149 PRRGQTRRRKNTSAHFLPMVYHS 171
RESULT 14
AAB10324
ID AAB10324 standard; Protein: 171 AA.
XX
XX AAB10324;
AC
XX
XX 20-NOV-2000 (first entry)
DT
XX
XX Human KGF-2 mutant KGF2delta4 protein SEQ ID NO: 116.
DE
XX
XX Human; keratinocyte growth factor: KGF-2; antidiabetic;
XX antiinflammatory; cytoprotective; dermatological; gastrointestinal;
XX hepatic; respiratory; renal; cerebroprotective; mucositis; treatment;
XX epithelial cell proliferation; inflammatory bowel disease; lung damage;
XX liver disorder; diabetes; oral injury; gastrointestinal injury;
XX gut toxicity; gastric; duodenal; epidermolysis bullosa; skin graft;
XX skin disorder; renal failure; brain injury; intestinal fibrosis;
XX proctitis; female reproductive tract disorder; pulmonary fibrosis;
XX pneumonitis; pleural retraction; hemopoietic syndrome; myelotoxicity;
XX mutant.
XX
XX Homo sapiens.
OS
XX
XX US6077692-A.
PN
XX
XX 20-JUN-2000.
PD
XX
XX 13-FEB-1998; 98US-0023082.
PF
XX
XX 13-AUG-1996; 96US-0023852.
PR
XX
XX 28-FEB-1997; 97US-0039045.
PR
XX
XX 13-AUG-1997; 97US-0055561.
PR
XX
XX 05-JUN-1995; 95US-0461195.
PR
XX
XX 14-FEB-1995; 95MO-US01790.
PR
XX
XX 23-MAY-1997; 97US-0862432.
PR
XX
XX 13-AUG-1997; 97US-0910875.
PR
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PA
XX
XX Mendrick D, Duan DR, Ni J, Jimenez P, Coleman TA, Gruber JR;
PI Dillon PJ, Gentz RL, Ruben SM, Zhang J, Moore PA, Rampy MA;
DR
XX
XX WPI: 2000-441307/38.
DR
XX
XX N-PSDB; AA471286.
XX
XX Novel keratinocyte growth factor useful for promoting and accelerating
XX wound healing, comprising at least 10 contiguous amino acids from a
XX specific amino acid sequence -
XX
XX Example 16; Column 195-198; 190pp; English.
XX
XX This invention describes a novel human keratinocyte growth factor, KGF-2

CC (1), which has antiulcer, antidiabetic, antiinflammatory, cytoprotective,
 CC dermatological, gastrointestinal, hepatic, respiratory, renal and
 CC cerebroprotective activity. (1) is useful for stimulating epithelial cell
 CC proliferation in patients suffering from wound, mucositis, ulcer such as
 CC venous stasis ulcer, diabetic ulcer and cubitus ulcer. (1) is also useful
 CC for treating inflammatory bowel disease, liver disorder, lung damage,
 CC diabetes, oral injury, gastrointestinal injury, gut toxicity, gastric
 CC ulcer, duodenal ulcer, gastrophysiological injury, skin graft, skin disorder,
 CC renal failure, brain injury, breast tissue injury, urothelial damage,
 CC female reproductive tract disorder, intestinal fibrosis, proctitis,
 CC pulmonary fibrosis, pneumonitis, pleural retraction, hemopoietic syndrome
 CC and myelotoxicity. (1) is also useful for increasing the adherence of
 CC skin grafts to wound beds and to stimulate re-epithelialization from the
 CC wound bed, to produce changes in hepatocyte proliferation, to reduce the
 CC side effects of gut toxicity, to regenerate skin in full and partial
 CC thickness skin defects, and to prevent and heal damage to lungs. KGF-2
 CC shows enhanced activity, increased stability, higher yield and better
 CC solubility. This sequence represents the human KGF-2 mutant protein
 CC KGF2delta described in the method of the invention.

Sequence 171 AA:

Query Match 100.0%; Score 765; DB 21; Length 171;
 Best Local Similarity 100.0%; Pred. No. 1.7e-77;
 Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HRSYNNHLOGDVRMRKLFSTKTFLEKNGKVSCTKKNCPYSILETSVEIGVAVKA 60
 DB 29 HRSYNNHLOGDVRMRKLFSTKTFLEKNGKVSCTKKNCPYSILETSVEIGVAVKA 88
 QY 61 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 120
 DB 89 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 148
 QY 121 PRGQKTRRKNTSAHFLPMVYHS 143
 DB 149 PRGQKTRRKNTSAHFLPMVYHS 171

RESULT 15

AAB61688
 ID AAB61688 standard; Protein; 171 AA.

AC AAB61688;
 DT 10-APR-2001 (first entry)
 XX

DE KGF-2 mutant #5.

XX Keratinocyte growth factor; KGF-2; epithelial cell proliferation; wound;
 XX mucositis; ulcer; inflammatory bowel disease; liver disorder;
 KW lung damage; diabetes; oral injury; gastrointestinal injury;
 KW epidermolysis bullosa; renal failure; brain injury; proctitis;
 KW pulmonary fibrosis; haemopoietic syndrome; ovary injury; infertility;
 KW liver fibrosis.

XX Unidentified.

PN MO200102433-A1.

PD 11-JAN-2001.

PF 03-JUL-2000; 2000WO-US18328.

XX 02-JUL-1999; 9905-0142343.
 PR 14-JUL-1999; 9905-0143648.
 PR 15-JUL-1999; 9905-0144024.
 PR 12-AUG-1999; 9905-0148628.
 PR 19-AUG-1999; 9905-0149935.
 PR 03-NOV-1999; 9905-0163375.
 PR 22-DEC-1999; 9905-0171677.
 PR 19-APR-2000; 2000US-0198322.
 PR 19-MAY-2000; 2000US-0205417.

PR 30-JUN-2000; 2000US-9911224.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA Ruben SM, Jimenez P, Duan DR, Rampy MA, Mendrick D, Zhang J;
 PI Ni J, Moore PA, Coleman TA, Gruber JR, Dillon PJ, Gentz RL;
 XX WPI: 2001-071578/08.
 DR N-PSDB: AAF31984.

XX A polynucleotide encoding the human keratinocyte growth factor useful
 PT for stimulating epithelial cell proliferation in a patients that has
 PT e.g a wound.

XX Example 16; Page 340; 591pp; English.

CC The present invention relates to human keratinocyte growth factor (KGF-2;
 CC see AAF31901 and AAB61657). The present sequence is a KGF-2 construct
 CC to stimulate epithelial cell proliferation in a patient, where the
 CC patient has a wound, mucositis, an ulcer, inflammatory bowel disease,
 CC liver disorder, lung damage, diabetes, oral injury, gastrointestinal
 CC injury, gut toxicity, epidermolysis bullosa, skin graft, skin disorder,
 CC renal failure, brain injury, breast tissue injury, urothelial damage,
 CC female reproductive tract disorder, intestinal fibrosis, proctitis,
 CC pulmonary fibrosis, pneumonitis, pleural retraction, haemopoietic
 CC syndrome, and myelotoxicity. In addition, KGF-2 can be used in the
 CC treatment or prevention of ovary injury, infertility, or fibrosis of the
 CC liver. KGF-2 also promotes internal healing, donor site healing, internal
 CC surgical wound healing or healing of incisional wounds made during
 CC cosmetic surgery in a patient.

Sequence 171 AA:

Query Match 100.0%; Score 765; DB 22; Length 171;
 Best Local Similarity 100.0%; Pred. No. 1.7e-77;
 Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HRSYNNHLOGDVRMRKLFSTKTFLEKNGKVSCTKKNCPYSILETSVEIGVAVKA 60
 DB 29 HRSYNNHLOGDVRMRKLFSTKTFLEKNGKVSCTKKNCPYSILETSVEIGVAVKA 88
 QY 61 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 120
 DB 89 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 148
 QY 121 PRGQKTRRKNTSAHFLPMVYHS 143
 DB 149 PRGQKTRRKNTSAHFLPMVYHS 171

Search completed: November 18, 2002, 16:05:27
 Job time : 37 secs

GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 18, 2002, 16:05:27 ; Search time 14 Seconds

(without alignments)
300,534 Million cell updates/sec

Title: US-09-284-100A-2_COPY_66_208

Perfect score: 765
Sequence: 1 HVRSYNLOGDVRRKRLFSF.....GQKTRRKNLSAHFLPMVHS 143

Scoring table:

BLOSUM62
Gapop 10.0 , Capext 0.5

Searched: 262574 seqs, 29422922 residues

al number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents_AA:*
1: /cgn2_6/ptodata/1/iaa/5A.COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B.COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/5A.COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/5B.COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS.COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	765	100.0	147	3	US-09-023-082A-68 Sequence 68, Appl
2	765	100.0	171	3	US-09-023-082A-116 Sequence 116, Appl
3	765	100.0	174	3	US-09-023-082A-43 Sequence 43, Appl
4	765	100.0	174	3	US-09-023-082A-55 Sequence 55, Appl
5	765	100.0	174	3	US-09-023-082A-66 Sequence 66, Appl
6	765	100.0	184	3	US-09-023-082A-30 Sequence 30, Appl
7	765	100.0	208	1	US-08-462-169B-20 Sequence 20, Appl
8	765	100.0	208	2	US-08-951-822-30 Sequence 30, Appl
9	765	100.0	208	3	US-09-023-082A-2 Sequence 2, Appl
10	765	100.0	208	3	US-09-023-082A-2 Sequence 2, Appl
11	765	100.0	208	3	US-09-023-082A-2 Sequence 2, Appl
12	765	100.0	208	3	US-09-023-082A-24 Sequence 24, Appl
13	765	100.0	208	3	US-09-023-082A-39 Sequence 39, Appl
14	765	100.0	208	4	US-09-218-444-2 Sequence 2, Appl
15	765	100.0	208	4	US-09-368-951-30 Sequence 30, Appl
16	748	97.8	141	3	US-09-023-082A-96 Sequence 96, Appl
17	748	97.8	141	3	US-09-023-082A-112 Sequence 112, Appl
18	748	97.8	141	4	US-09-218-444-17 Sequence 17, Appl
19	748	97.8	141	4	US-09-023-082A-124 Sequence 124, Appl
20	744	97.3	141	3	US-09-023-082A-128 Sequence 128, Appl
21	744	97.3	141	3	US-09-023-082A-132 Sequence 132, Appl
22	744	97.3	141	3	US-09-023-082A-140 Sequence 140, Appl
23	744	97.3	141	3	US-09-023-082A-146 Sequence 146, Appl
24	743	97.1	141	3	US-09-023-082A-120 Sequence 120, Appl
25	739	96.6	140	3	US-09-023-082A-136 Sequence 136, Appl
26	702	91.8	133	3	US-09-023-082A-70 Sequence 70, Appl

28	617	80.7	117	3	US-09-023-082A-72 Sequence 72, Appl
29	560	73.2	106	3	US-09-023-082A-74 Sequence 74, Appl
30	465	60.8	87	3	US-09-023-082A-76 Sequence 76, Appl
31	465	60.8	92	3	US-09-023-082A-82 Sequence 82, Appl
32	465	60.8	119	3	US-09-023-082A-80 Sequence 80, Appl
33	427.5	55.9	194	1	US-08-439-725A-15 Sequence 15, Appl
34	427.5	55.9	194	1	US-08-464-590A-12 Sequence 12, Appl
35	427.5	55.9	194	1	US-08-462-169B-15 Sequence 15, Appl
36	427.5	55.9	194	1	US-08-468-546-1 Sequence 1, Appl
37	427.5	55.9	194	2	US-08-207-412B-15 Sequence 15, Appl
38	427.5	55.9	194	2	US-08-468-547-1 Sequence 1, Appl
39	427.5	55.9	194	2	US-08-817-260-2 Sequence 2, Appl
40	427.5	55.9	194	2	US-08-867-937-1 Sequence 1, Appl
41	427.5	55.9	194	2	US-08-867-471-15 Sequence 15, Appl
42	427.5	55.9	194	2	US-08-438-439C-15 Sequence 15, Appl
43	427.5	55.9	194	2	US-08-438-439C-23 Sequence 23, Appl
44	427.5	55.9	194	2	US-08-951-822-31 Sequence 31, Appl
45	427.5	55.9	194	2	US-08-951-822-31 Sequence 31, Appl

ALIGNMENTS

RESULT 1
US-09-023-082A-68
Sequence 68, Application US/09023082A
Patent No. 6077692
GENERAL INFORMATION:
APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPEY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,082A
FILING DATE: 13-FEB-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/910,875
FILING DATE: 13-AUG-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEFFEE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0360008/EKS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 68:
SEQUENCE CHARACTERISTICS:
LENGTH: 147 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein

US-09-023-082A-68

Query Match

Best Local Similarity 100.0%; Score 765; DB 3; Length 147;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNIHOGDVWRKLFSTFKYFLKIEKNGKVSCTKKNCPYSILEITSVEIGVAVKA 60
DB 5 HVRSYNIHOGDVWRKLFSTFKYFLKIEKNGKVSCTKKNCPYSILEITSVEIGVAVKA 64
QY 61 INSNTYLAANKKGLYSGKEFNNDCKLKERIEENGNTYASFNMOHNGROMYVALNGKA 120
DB 65 INSNTYLAANKKGLYSGKEFNNDCKLKERIEENGNTYASFNMOHNGROMYVALNGKA 124
QY 121 PRGQKTRRKNNTSAHFLPMVYHS 143
DB 125 PRGQKTRRKNNTSAHFLPMVYHS 147

RESULT 2

US-09-023-082A-116
Sequence 116, Application US/09023082A
Patent No. 6077692

GENERAL INFORMATION:
APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,082A
FILING DATE: 13-FEB-1998
CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/910,875
FILING DATE: 13-AUG-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEFFEE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0360008/EKS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 116:
SEQUENCE CHARACTERISTICS:
LENGTH: 171 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: not relevant
MOLECULE TYPE: protein

US-09-023-082A-116

Query Match

Best Local Similarity 100.0%; Score 765; DB 3; Length 171;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNIHOGDVWRKLFSTFKYFLKIEKNGKVSCTKKNCPYSILEITSVEIGVAVKA 60
DB 29 HVRSYNIHOGDVWRKLFSTFKYFLKIEKNGKVSCTKKNCPYSILEITSVEIGVAVKA 88
QY 61 INSNTYLAANKKGLYSGKEFNNDCKLKERIEENGNTYASFNMOHNGROMYVALNGKA 120
DB 89 INSNTYLAANKKGLYSGKEFNNDCKLKERIEENGNTYASFNMOHNGROMYVALNGKA 148
QY 121 PRGQKTRRKNNTSAHFLPMVYHS 143
DB 149 PRGQKTRRKNNTSAHFLPMVYHS 171

RESULT 3

US-09-023-082A-43
Sequence 43, Application US/09023082A
Patent No. 6077692

GENERAL INFORMATION:
APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148

Db 32 HRSYHNLQGDVBRKLFSEFTKYFLKTEKNGKVSCTKKNCPYSILEITSVEIGVAVKA 91
QY 61 INSNVYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMWONGROMYVALNGKA 120
Db 92 INSNVYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMWONGROMYVALNGKA 151
QY 121 PRGOKTRRKNKTSAHFLPMVHVS 143
Db 152 PRGOKTRRKNKTSAHFLPMVHVS 174

RESULT 5

US-09-023-082A-66
Sequence 66, Application US/09023082A

GENERAL INFORMATION:

APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC

COUNTRY: USA

ZIP: 20005-3934

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/023,082A

FILING DATE: 13-FEB-1998

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/01790

FILING DATE: 14-FEB-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/461,195

FILING DATE: 05-JUN-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/023,852

FILING DATE: 13-AUG-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/039,045

FILING DATE: 28-FEB-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/862,432

FILING DATE: 23-MAY-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/910,875

FILING DATE: 13-AUG-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/055,561

FILING DATE: 13-AUG-1997

ATTORNEY/AGENT INFORMATION:

NAME: STEFFE, ERIC K.

REGISTRATION NUMBER: 36,688

REFERENCE/DOCKET NUMBER: 1468.0360008/EKS

TELECOMMUNICATION INFORMATION:

TELEPHONE: 202-371-2600

TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 66:
SEQUENCE CHARACTERISTICS:
LENGTH: 174 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-023-082A-66

Query Match

Best local Similarity 100.0%; Score 765; DB 3; Length 174;

Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HRSYHNLQGDVBRKLFSEFTKYFLKTEKNGKVSCTKKNCPYSILEITSVEIGVAVKA 60
Db 32 HRSYHNLQGDVBRKLFSEFTKYFLKTEKNGKVSCTKKNCPYSILEITSVEIGVAVKA 91
QY 61 INSNVYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMWONGROMYVALNGKA 120
Db 92 INSNVYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMWONGROMYVALNGKA 151
QY 121 PRGOKTRRKNKTSAHFLPMVHVS 143
Db 152 PRGOKTRRKNKTSAHFLPMVHVS 174

RESULT 6

US-09-023-082A-30
Sequence 30, Application US/09023082A

GENERAL INFORMATION:

APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC

COUNTRY: USA

ZIP: 20005-3934

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/023,082A

FILING DATE: 13-FEB-1998

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/01790

FILING DATE: 14-FEB-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/461,195

FILING DATE: 05-JUN-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/023,852

FILING DATE: 13-AUG-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/039,045

FILING DATE: 28-FEB-1997

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/910,875
FILING DATE: 13-AUG-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEFFEL, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0360008/EKS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 184 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-023-082A-30

Query Match 100.0%; Score 765; DB 3; Length 184;
Best Local Similarity 100.0%; Pred. No. 1e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNHLOGDVWRKLFSTKYFLKIEKNGVSGTKKENCPSYLETTSVEIGVAVKA 60
|||||
DB 42 HVRSYNHLOGDVWRKLFSTKYFLKIEKNGVSGTKKENCPSYLETTSVEIGVAVKA 101
QY 61 INSNYYLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMWONGROMYVALNGKA 120
|||||
DB 102 INSNYYLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMWONGROMYVALNGKA 161
QY 121 PRRGKTRRKNTSAHFLPMVYHS 143
|||||
DB 162 PRRGKTRRKNTSAHFLPMVYHS 184

RESULT 7
US-08-462-169B-20
Sequence 20, Application US/08462169B
Patent No. 5773252
GENERAL INFORMATION:
APPLICANT: John Greene and Craig A. Rosen
TITLE OF INVENTION: Fibroblast Growth Factor-15
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESSES:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462,169B
FILING DATE: 05 JUN 95
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: MULLINS, J.G.
REGISTRATION NUMBER: 33,073
REFERENCE/DOCKET NUMBER: 325800-441 (PF203)
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 208 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
US-08-462-169B-20

Query Match 100.0%; Score 765; DB 1; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.2e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNHLOGDVWRKLFSTKYFLKIEKNGVSGTKKENCPSYLETTSVEIGVAVKA 60
|||||
DB 66 HVRSYNHLOGDVWRKLFSTKYFLKIEKNGVSGTKKENCPSYLETTSVEIGVAVKA 125
QY 61 INSNYYLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMWONGROMYVALNGKA 120
|||||
DB 126 INSNYYLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMWONGROMYVALNGKA 185
QY 121 PRRGKTRRKNTSAHFLPMVYHS 143
|||||
DB 186 PRRGKTRRKNTSAHFLPMVYHS 208

RESULT 8
US-08-951-822-30
Sequence 30, Application US/08951822A
Patent No. 5989866
GENERAL INFORMATION:
APPLICANT: Deisher, Theresa A.
APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Penella
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Hansen, Birgit
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20
CURRENT APPLICATION NUMBER: US/08/951,822A
CURRENT FILING DATE: 1997-10-16
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 30
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-08-951-822-30

Query Match 100.0%; Score 765; DB 2; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.2e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNHLOGDVWRKLFSTKYFLKIEKNGVSGTKKENCPSYLETTSVEIGVAVKA 60
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DB 66 HVRSYNHLOGDVWRKLFSTKYFLKIEKNGVSGTKKENCPSYLETTSVEIGVAVKA 125
QY 61 INSNYYLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMWONGROMYVALNGKA 120
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DB 126 INSNYYLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFMWONGROMYVALNGKA 185
QY 121 PRRGKTRRKNTSAHFLPMVYHS 143
|||||
DB 186 PRRGKTRRKNTSAHFLPMVYHS 208

RESULT 9
US-09-103-079-20
Sequence 20, Application US/09103079A
Patent No. 6013477
GENERAL INFORMATION:
APPLICANT: Greene, John M.

APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Fibroblast Growth Factor 15
FILE REFERENCE: PF203D1
CURRENT APPLICATION NUMBER: US/09/103,079A
CURRENT FILING DATE: 1998-06-23
EARLIER APPLICATION NUMBER: 08/462,169
EARLIER FILING DATE: 1995-06-05
NUMBER OF SEQ ID NOS: 32
SOFTWARE: Patentln Ver. 2.0
SEQ ID NO: 20
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-09-103-079-20

Query Match 100.0%; Score 765; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1,2e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 1 HVRSYNHLOGDVNRKLFSTTKYFLKIEKNKGVSTKKEKCPYSILEITSVEIGVAVKA 60
D 66 HVRSYNHLOGDVNRKLFSTTKYFLKIEKNKGVSTKKEKCPYSILEITSVEIGVAVKA 125
Y 61 INSNYLAMNKKGLYSGKEFNNDCKLERIEENGYNVTYASFNMHNGROMYVALNKGGA 120
D 126 INSNYLAMNKKGLYSGKEFNNDCKLERIEENGYNVTYASFNMHNGROMYVALNKGGA 185
Y 121 PRGQKTRKNTSAHFLPMVYHS 143
D 186 PRGQKTRKNTSAHFLPMVYHS 208

RESULT 10
US-09-023-082A-2
Sequence 2, Application US/09023082A
Patent No. 6077692
GENERAL INFORMATION:
APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,082A
FILING DATE: 13-FEB-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-JUN-1995

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/910,875
FILING DATE: 13-AUG-1997
APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEEPPE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488,0360008/EKS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 208 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-023-082A-2

Query Match 100.0%; Score 765; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1,2e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 1 HVRSYNHLOGDVNRKLFSTTKYFLKIEKNKGVSTKKEKCPYSILEITSVEIGVAVKA 60
D 66 HVRSYNHLOGDVNRKLFSTTKYFLKIEKNKGVSTKKEKCPYSILEITSVEIGVAVKA 125
Y 61 INSNYLAMNKKGLYSGKEFNNDCKLERIEENGYNVTYASFNMHNGROMYVALNKGGA 120
D 126 INSNYLAMNKKGLYSGKEFNNDCKLERIEENGYNVTYASFNMHNGROMYVALNKGGA 185
Y 121 PRGQKTRKNTSAHFLPMVYHS 143
D 186 PRGQKTRKNTSAHFLPMVYHS 208

RESULT 11
US-09-023-082A-20
Sequence 20, Application US/09023082A
Patent No. 6077692
GENERAL INFORMATION:
APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,082A
FILING DATE: 13-FEB-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEEFEE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488, 0360008/EKS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2540
FAX: 202-371-2600
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 208 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
US-09-023-082A-20

Query Match 100.0%; Score 765; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.2e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HVRSYNHLQGDVWRKRLFSFTKYFLKIEKNKGVSTKKNCPYSILETTSVEIGVAVKA 60
|||||
66 HVRSYNHLQGDVWRKRLFSFTKYFLKIEKNKGVSTKKNCPYSILETTSVEIGVAVKA 125

DB 61 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFNMQHNGROMYVALNGKA 120
|||||
DB 126 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFNMQHNGROMYVALNGKA 185

QY 121 PRGOKTRKNTSAHFLPMYVHS 143
|||||

DB 186 PRGOKTRKNTSAHFLPMYVHS 208

RESULT 12
US-09-023-082A-24
Sequence 24, Application US/09023082A
Patent No. 6077692
GENERAL INFORMATION:
APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPY, MARK A.
APPLICANT: MENDRICK, DONNA

APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GRUBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,082A
FILING DATE: 13-FEB-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEEFEE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488, 0360008/EKS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2540
FAX: 202-371-2600
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 208 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-023-082A-24

Query Match 100.0%; Score 765; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.2e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HVRSYNHLQGDVWRKRLFSFTKYFLKIEKNKGVSTKKNCPYSILETTSVEIGVAVKA 60
|||||
66 HVRSYNHLQGDVWRKRLFSFTKYFLKIEKNKGVSTKKNCPYSILETTSVEIGVAVKA 125

DB 61 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFNMQHNGROMYVALNGKA 120
|||||
DB 126 INSNTYLLAMNKKGLYSGKEFNNDCKLKERIEENGNTYASFNMQHNGROMYVALNGKA 185

QY 121 PRGOKTRKNTSAHFLPMVVS 143
DB 186 PRGOKTRKNTSAHFLPMVVS 208

RESULT 13

US-09-023-082A-39
Sequence 39, Application US/09023082A
Patent No. 6077692

GENERAL INFORMATION:

APPLICANT: RUBEN, STEVEN M.
APPLICANT: JIMENEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: RAMPEY, MARK A.
APPLICANT: MENDRICK, DONNA
APPLICANT: ZHANG, JUN
APPLICANT: NI, JIAN
APPLICANT: MOORE, PAUL A.
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: GROBER, JOACHIM R.
APPLICANT: DILLON, PATRICK J.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,082A
FILING DATE: 13-FEB-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/910,875
FILING DATE: 13-AUG-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEFFLE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488,0360008/EKS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540

INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
LENGTH: 208 amino acids
TYPE: amino acid
TOPOLOGY: linear

MORCULE TYPE: protein
US-09-023-082A-39

Query Match
Best Local Similarity 100.0%; Score 765; DB 3; length 208;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNHLOGDVWRKRLFSFTKYELKIERKNGVSGTKRKCPCYSILETTSVEIGVAVKA 60

DB 66 HVRSYNHLOGDVWRKRLFSFTKYELKIERKNGVSGTKRKCPCYSILETTSVEIGVAVKA 125

QY 61 INSNTYLAANKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 120

DB 126 INSNTYLAANKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 185

QY 121 PRGOKTRKNTSAHFLPMVVS 143

DB 186 PRGOKTRKNTSAHFLPMVVS 208

RESULT 14

US-09-218-444-2
Sequence 2, Application US/09218444
Patent No. 6238888

GENERAL INFORMATION:

APPLICANT: Gentz, Reiner L.
APPLICANT: Chopra, Arvind
APPLICANT: Kauschal, Parveen
APPLICANT: Spitznagel, Thomas
APPLICANT: Unsworth, Edward
APPLICANT: Khan, Fazal
TITLE OF INVENTION: Keratinocyte Growth Factor-2 Formulations
FILE REFERENCE: 1488,1030001
CURRENT APPLICATION NUMBER: US/09/218,444
CURRENT FILING DATE: 1998-12-22
EARLIER APPLICATION NUMBER: US 60/068,493
EARLIER FILING DATE: 1997-12-22
NUMBER OF SEQ ID NOS: 33
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-09-218-444-2

Query Match
Best Local Similarity 100.0%; Score 765; DB 4; length 208;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNHLOGDVWRKRLFSFTKYELKIERKNGVSGTKRKCPCYSILETTSVEIGVAVKA 60

DB 66 HVRSYNHLOGDVWRKRLFSFTKYELKIERKNGVSGTKRKCPCYSILETTSVEIGVAVKA 125

QY 61 INSNTYLAANKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 120

DB 126 INSNTYLAANKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKA 185

QY 121 PRGOKTRKNTSAHFLPMVVS 143

DB 186 PRGOKTRKNTSAHFLPMVVS 208

RESULT 15

US-09-368-951-30
Sequence 30, Application US/09368951
Patent No. 6352971

GENERAL INFORMATION:

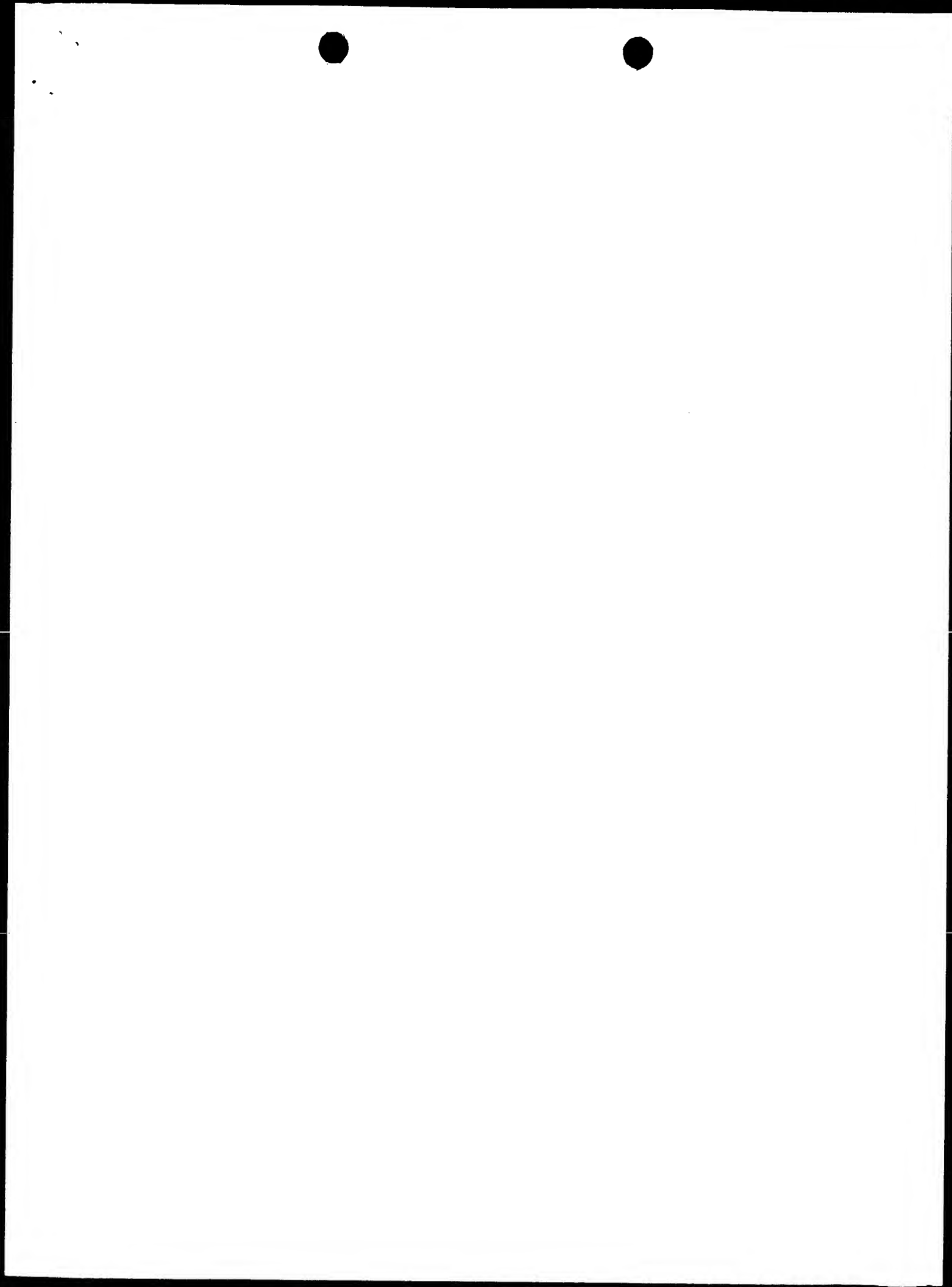
APPLICANT: Deisher, Theresa A.
APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Renella
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Hansen, Birgit

APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20
CURRENT APPLICATION NUMBER: US/09/368, 951
CURRENT FILING DATE: 1999-08-05
EARLIER APPLICATION NUMBER: 08/951, 822
EARLIER FILING DATE: 1997-10-16
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO: 30
LENGTH: 208
TYPE: prt
ORGANISM: Homo sapiens
US-09-368-951-30

Query Match 100.0%; Score 765; DB 4; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.2e-77;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HVRSYVHLOGDVRWRKLESETKYYFLKIEKNGVSGTKKENCPSILEITSVETGVAVKA 60
|||||
66 HVRSYVHLOGDVRWRKLESETKYYFLKIEKNGVSGTKKENCPSILEITSVETGVAVKA 125
|||||
QY 61 INSNYLLAMNKKKGLYGSKEFNNDCKLKERIEENGYNFYASFNMQHNGRQYVALNGKA 120
|||||
DB 126 INSNYLLAMNKKKGLYGSKEFNNDCKLKERIEENGYNFYASFNMQHNGRQYVALNGKA 185
|||||
QY 121 PRGQKTRRRKNTSAHFLPMVVS 143
|||||
DB 186 PRGQKTRRRKNTSAHFLPMVVS 208
|||||

Search completed: November 18, 2002, 16:07:45
Job time: 15 secs



GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 18, 2002, 16:07:32 ; Search time 11 Seconds

(without alignments)
195.792 Million cell updates/sec

Title: US-09-284-100A-2_COPY_66_208

Perfect score: 765
Sequence: 1 HVRSYNIHQGVRRKLFSEFTKTKYFLKIEKNKVSCTKKEKNCPSITLITTSVEIGVAVKA 143

Scoring table:

BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 97044 seqs, 15060890 residues

al number of hits satisfying chosen parameters: 97044

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications_AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	765	100.0	208	10	US-09-822-485-13
2	765	100.0	208	10	US-09-853-666-2
3	765	100.0	208	10	US-09-750-963-4
4	765	100.0	208	10	US-09-425-021-20
5	765	100.0	243	10	US-09-925-302-586
6	748	97.8	141	10	US-09-853-666-17
7	748	97.8	141	10	US-09-853-666-33
8	700.5	91.6	135	9	US-09-901-938-20
9	435	56.9	162	10	US-09-822-485-35
10	431	56.3	148	10	US-09-822-485-2
11	431	56.3	170	10	US-09-822-485-2
12	431	56.3	170	10	US-09-750-963-2
13	431	56.3	170	12	US-10-005-646-4
14	430	56.2	140	10	US-09-822-485-33
15	430	56.2	162	10	US-09-822-485-32
16	427.5	55.9	194	10	US-09-822-485-10
17	427.5	55.9	194	10	US-09-284-663A-11
18	427.5	55.9	194	10	US-09-750-963-5
19	427.5	55.9	194	10	US-09-902-773A-10

20	427.5	55.9	194	10	US-09-251-263-15	Sequence 15, Appl
21	427.5	55.9	194	10	US-09-425-021-15	Sequence 15, Appl
22	422	55.2	193	9	US-10-131-965-11	Sequence 11, Appl
23	419.5	54.8	190	12	US-10-016-447-14	Sequence 14, Appl
24	411.5	53.8	194	10	US-09-990-578-2	Sequence 2, Appl
25	411.5	53.8	194	10	US-09-990-578-4	Sequence 4, Appl
26	399	52.2	136	9	US-09-901-938-21	Sequence 21, Appl
27	357	46.7	155	10	US-09-425-021-24	Sequence 24, Appl
28	352.5	46.1	183	12	US-10-016-447-15	Sequence 15, Appl
29	352.5	46.1	240	10	US-10-131-965-7	Sequence 7, Appl
30	352.5	46.1	245	10	US-09-251-263-11	Sequence 11, Appl
31	341.5	44.6	239	10	US-09-822-485-6	Sequence 6, Appl
32	341.5	44.6	239	10	US-09-750-963-8	Sequence 8, Appl
33	341.5	44.6	239	10	US-09-902-773A-9	Sequence 9, Appl
34	341.5	44.6	239	10	US-09-902-773A-9	Sequence 9, Appl
35	326.5	42.7	150	9	US-09-901-938-22	Sequence 22, Appl
36	326	42.6	205	10	US-09-817-814-9	Sequence 9, Appl
37	326	42.6	205	10	US-09-817-814-10	Sequence 10, Appl
38	326	42.6	205	10	US-09-817-814-11	Sequence 11, Appl
39	326	42.6	208	9	US-10-131-965-13	Sequence 13, Appl
40	326	42.6	208	10	US-09-822-485-12	Sequence 12, Appl
41	326	42.6	208	10	US-09-750-963-7	Sequence 7, Appl
42	326	42.6	208	10	US-09-902-773A-8	Sequence 8, Appl
43	326	42.6	208	10	US-09-805-805-3	Sequence 3, Appl
44	326	42.6	208	10	US-09-805-805-4	Sequence 4, Appl
45	326	42.6	208	10	US-09-805-805-6	Sequence 6, Appl

ALIGNMENTS

RESULT 1
US-09-822-485-13
Sequence 13, Application US/09822485
Patent No. US20020001825A1
GENERAL INFORMATION:
APPLICANT: Iton, No. US20020001825A1Yukl
TITLE OR INVENTION: No. US20020001825A1el Fibroblast Growth Factor-Like Polypeptid
FILE REFERENCE: 08035.0001-01000
CURRENT APPLICATION NUMBER: US/09/822.485
CURRENT FILING DATE: 2001-04-02
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
JOURNAL: J. Biol. Chem.
VOLUME: 272
PAGES: 23191-23194
DATE: 1997
US-09-822-485-13

Query Match 100.0%; Score 765; DB 10; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.3e-76;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HVRSYNIHQGVRRKLFSEFTKTKYFLKIEKNKVSCTKKEKNCPSITLITTSVEIGVAVKA 60
DB 66 HVRSYNIHQGVRRKLFSEFTKTKYFLKIEKNKVSCTKKEKNCPSITLITTSVEIGVAVKA 125
QY 61 INSNVYLAAMNKKGLYSGKEFNNDCKLERLENGVYTFASFMWQHNGROMYVALNKGK 120
DB 126 INSNVYLAAMNKKGLYSGKEFNNDCKLERLENGVYTFASFMWQHNGROMYVALNKGK 185
QY 121 PRGOKTRRKNTSAHFLPMVYHS 143
DB 186 PRGOKTRRKNTSAHFLPMVYHS 208
RESULT 2
US-09-853-666-2

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; Sequence 2, Application US/09853666
; Patent No. US20020016295A1
; GENERAL INFORMATION:
; APPLICANT: Gentz, Reiner L.
; APPLICANT: Chopra, Arvind
; APPLICANT: Kausnal, Parveen
; APPLICANT: Spitznagel, Thomas
; APPLICANT: Unsworth, Edward
; APPLICANT: Khan, Fazal
; TITLE OF INVENTION: Keratinocyte Growth Factor-2 Formulations
; FILE REFERENCE: 1488.1030001
; CURRENT APPLICATION NUMBER: US/09/853,666
; PRIOR FILING DATE: 2001-05-14
; PRIOR APPLICATION NUMBER: 09/218,444
; PRIOR FILING DATE: 1998-12-22
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-853-666-2

Query Match      100.0%; Score 765; DB 10; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.3e-76;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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1 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 60
66 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 125
61 INSNTYLANMKKGLYSGKEFNNDCKLERIEENGNTYASFWMOHNGROMYVALNGKA 120
126 INSNTYLANMKKGLYSGKEFNNDCKLERIEENGNTYASFWMOHNGROMYVALNGKA 185
121 PRGOKTRRKNTSAHFLPMVHVS 143
186 PRGOKTRRKNTSAHFLPMVHVS 208
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RESULT 3
US-09-750-963-4
; Sequence 4, Application US/09750963
; Patent No. US20020031805A1
; GENERAL INFORMATION:
; APPLICANT: Conklin, Darrell C.
; TITLE OF INVENTION: NOVEL FGF HOMOLOG ZFGF10
; FILE REFERENCE: 99-83
; CURRENT APPLICATION NUMBER: US/09/750,963
; PRIOR FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/173,578
; PRIOR FILING DATE: 1999-12-29
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-750-963-4
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Query Match      100.0%; Score 765; DB 10; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.3e-76;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 60
66 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 125
61 INSNTYLANMKKGLYSGKEFNNDCKLERIEENGNTYASFWMOHNGROMYVALNGKA 120
126 INSNTYLANMKKGLYSGKEFNNDCKLERIEENGNTYASFWMOHNGROMYVALNGKA 185
121 PRGOKTRRKNTSAHFLPMVHVS 143
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186 PRGOKTRRKNTSAHFLPMVHVS 208
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RESULT 4
US-09-425-021-20
; Sequence 20, Application US/09425021
; Patent No. US20020076748A1
; GENERAL INFORMATION:
; APPLICANT: Greene, John M.
; APPLICANT: Rosen, Craig A.
; TITLE OF INVENTION: Fibroblast Growth Factor 15
; FILE REFERENCE: P20301
; CURRENT APPLICATION NUMBER: US/09/425,021
; PRIOR FILING DATE: 1999-10-25
; EARLIER APPLICATION NUMBER: 09/103,079
; EARLIER FILING DATE: 1998-06-23
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-425-021-20
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Query Match      100.0%; Score 765; DB 10; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.3e-76;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 60
66 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 125
61 INSNTYLANMKKGLYSGKEFNNDCKLERIEENGNTYASFWMOHNGROMYVALNGKA 120
126 INSNTYLANMKKGLYSGKEFNNDCKLERIEENGNTYASFWMOHNGROMYVALNGKA 185
121 PRGOKTRRKNTSAHFLPMVHVS 143
186 PRGOKTRRKNTSAHFLPMVHVS 208
```

```
RESULT 5
US-09-925-302-586
; Sequence 586, Application US/09925302
; Patent No. US2002004941A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA104
; CURRENT APPLICATION NUMBER: US/09/925,302
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05918
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 896
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 586
; LENGTH: 243
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-302-586
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Query Match      100.0%; Score 765; DB 10; Length 243;
Best Local Similarity 100.0%; Pred. No. 2.8e-76;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 60
101 HVRSYNHLOGDVWRKLFSTKTYFLKTEKNGKVSCTKREKNCPSILEITSVEIGVAVKA 160
61 INSNTYLANMKKGLYSGKEFNNDCKLERIEENGNTYASFWMOHNGROMYVALNGKA 120
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Db 161 INSNVYLAAMKKGKLYGSKFENNDCLEKRIEENGNTYASFMQHNQROMYVALNGKGA 220
QY 121 PRRGOKTRRKNTSAHFLPMVYHS 143
Db 221 PRRGOKTRRKNTSAHFLPMVYHS 243

RESULT 6
US-09-853-666-17
; Sequence 17, Application US/09853666
; Patent No. US20020016295A1
; GENERAL INFORMATION:
; APPLICANT: Gentz, Reiner L.
; APPLICANT: Chopra, Arvind
; APPLICANT: Kaushal, Parveen
; APPLICANT: Spitznagel, Thomas
; APPLICANT: Unsworth, Edward
; APPLICANT: Khan, Fazal
; TITLE OF INVENTION: Keratinocyte Growth Factor-2 Formulations
FILE REFERENCE: 1488.1030001
CURRENT APPLICATION NUMBER: US/09/853,666
CURRENT FILING DATE: 2001-05-14
PRIOR APPLICATION NUMBER: 09/218,444
PRIOR FILING DATE: 1998-12-22
NUMBER OF SEQ ID NOS: 33
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 17
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-09-853-666-17

Query Match 97.8%; Score 748; DB 10; Length 141;
Best Local Similarity 100.0%; Pred. No. 1e-74;
Matches 140; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 SYNHLQGVWRMRKLFSTKYFLKIEKNKGVSGTKKENCPSYILETTSVEIGVAVKAINYS 63
Db 2 SYNHLQGVWRMRKLFSTKYFLKIEKNKGVSGTKKENCPSYILETTSVEIGVAVKAINYS 61
QY 64 NYVLAMNKKGKLYGSKFENNDCLEKRIEENGNTYASFMQHNQROMYVALNGKAPRR 123
Db 62 NYVLAMNKKGKLYGSKFENNDCLEKRIEENGNTYASFMQHNQROMYVALNGKAPRR 121
QY 124 GOKTRRKNTSAHFLPMVYHS 143
Db 122 GOKTRRKNTSAHFLPMVYHS 141

RESULT 7
US-09-853-666-33
; Sequence 33, Application US/09853666
; Patent No. US20020016295A1
; GENERAL INFORMATION:
; APPLICANT: Gentz, Reiner L.
; APPLICANT: Chopra, Arvind
; APPLICANT: Kaushal, Parveen
; APPLICANT: Spitznagel, Thomas
; APPLICANT: Unsworth, Edward
; APPLICANT: Khan, Fazal
; TITLE OF INVENTION: Keratinocyte Growth Factor-2 Formulations
FILE REFERENCE: 1488.1030001
CURRENT APPLICATION NUMBER: US/09/853,666
CURRENT FILING DATE: 2001-05-14
PRIOR APPLICATION NUMBER: 09/218,444
PRIOR FILING DATE: 1998-12-22
NUMBER OF SEQ ID NOS: 33
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 33
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
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US-09-853-666-33
Query Match 97.8%; Score 748; DB 10; Length 141;
Best Local Similarity 100.0%; Pred. No. 1e-74;
Matches 140; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 SYNHLQGVWRMRKLFSTKYFLKIEKNKGVSGTKKENCPSYILETTSVEIGVAVKAINYS 63
Db 2 SYNHLQGVWRMRKLFSTKYFLKIEKNKGVSGTKKENCPSYILETTSVEIGVAVKAINYS 61
QY 64 NYVLAMNKKGKLYGSKFENNDCLEKRIEENGNTYASFMQHNQROMYVALNGKAPRR 123
Db 62 NYVLAMNKKGKLYGSKFENNDCLEKRIEENGNTYASFMQHNQROMYVALNGKAPRR 121
QY 124 GOKTRRKNTSAHFLPMVYHS 143
Db 122 GOKTRRKNTSAHFLPMVYHS 141

RESULT 8
US-09-901-938-20
; Sequence 20, Application US/09901938
; Patent No. US20020156001A1
; GENERAL INFORMATION:
; APPLICANT: ECONS, Michael
; APPLICANT: WHITE, Kenneth
; APPLICANT: STROM, Tim
; APPLICANT: MEITINGER, Thomas
; TITLE OF INVENTION: NOVEL FIBROBLAST GROWTH FACTOR (FGF23) AND METHODS FOR USE
FILE REFERENCE: 053884-5001
CURRENT APPLICATION NUMBER: US/09/901,938
CURRENT FILING DATE: 2001-07-10
PRIOR APPLICATION NUMBER: 60/219,137
PRIOR FILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PatentIn version 3.0
SEQ ID NO 20
LENGTH: 135
TYPE: PRT
ORGANISM: Homo Sapiens
US-09-901-938-20

Query Match 91.6%; Score 700.5; DB 9; Length 135;
Best Local Similarity 98.5%; Pred. No. 1.5e-69;
Matches 134; Conservative 0; Mismatches 1; Indels 1; Gaps 1;

QY 8 LOGDVRMRKLFSTKYFLKIEKNKGVSGTKKENCPSYILETTSVEIGVAVKAINSYL 67
Db 1 LOGDVRMRKLFSTKYFLKIEKNKGVSGTKKENCPSYILETTSVEIGVAVKAINSYL 60
QY 68 AMNKKGKLYGSKFENNDCLEKRIEENGNTYASFMQHNQROMYVALNGKAPRRGOKT 127
Db 61 AMNKKGKLYGSKFENNDCLEKRIEENGNTYASFMQHNQ-OMYVALNGKAPRRGOKT 119
QY 128 RRKNTSAHFLPMVYHS 143
Db 120 RRKNTSAHFLPMVYHS 135

RESULT 9
US-09-822-485-35
; Sequence 35, Application US/09822485
; Patent No. US2002001825A1
; GENERAL INFORMATION:
; APPLICANT: Itoh, No. US2002001825A1uyuk1
; TITLE OF INVENTION: NO. US2002001825A1el Fibroblast Growth Factor-Like Polypeptid
FILE REFERENCE: 08035.0001-01000
CURRENT APPLICATION NUMBER: US/09/822,485
CURRENT FILING DATE: 2001-04-02
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 35
LENGTH: 162
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TYPE: PRF
ORGANISM: Mus sp.
US-09-822-485-35

Query Match 56.9%; Score 431; DB 10; Length 162;
Best Local Similarity 54.0%; Pred. No. 1,7e-40;
Matches 75; Conservative 33; Mismatches 31; Indels 0; Gaps 0;

QY 5 YNHLQGVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAINSN 64
DB 24 YPHLEGDVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAINSN 83
QY 65 YIYAMKKKKKLYGSKFNNDCLEKRIEENGNTYASFNMONGROMYVALNGKAPRG 124
DB 84 FYVAMNRKRLYGSRLTYVDCRFERIEENGNTYASQRMWRROGPMFLALDRGGR 143

QY 125 OKQTRKNTSAHFLPMV 143
DB 144 RRTRRHQLSTHFLPLVSS 162

RESULT 10

US-09-822-485-3
Sequence 3, Application US/09822485
Patent No. US2002001825A1
GENERAL INFORMATION:
APPLICANT: IcoH, No. US2002001825A1uyuki
TITLE OF INVENTION: No. US2002001825A1el Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 08035.0001-01000
CURRENT APPLICATION NUMBER: US/09/822,485
CURRENT FILING DATE: 2001-04-02
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentln Ver. 2.0
SEQ ID NO 3
LENGTH: 148
TYPE: PRF
ORGANISM: Homo sapiens
US-09-822-485-3

Query Match 56.3%; Score 431; DB 10; Length 148;
Best Local Similarity 54.7%; Pred. No. 4.2e-40;
Matches 76; Conservative 33; Mismatches 30; Indels 0; Gaps 0;

QY 3 RSYNHLQGVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAIN 62
DB 9 RSYPHLEGDVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAIN 68
QY 63 SNYIYAMKKKKKLYGSKFNNDCLEKRIEENGNTYASFNMONGROMYVALNGKAPR 122
DB 69 SGFYVAMNRKRLYGSRLTYVDCRFERIEENGNTYASQRMWRROGPMFLALDRGGR 128

QY 123 RGQTRKNTSAHFLPMV 141
DB 129 PGRTRRYHLSAHFLPLV 147

RESULT 11

US-09-822-485-2
Sequence 2, Application US/09822485
Patent No. US2002001825A1
GENERAL INFORMATION:
APPLICANT: IcoH, No. US2002001825A1uyuki
TITLE OF INVENTION: No. US2002001825A1el Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 08035.0001-01000
CURRENT APPLICATION NUMBER: US/09/822,485
CURRENT FILING DATE: 2001-04-02
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentln Ver. 2.0
SEQ ID NO 2
LENGTH: 170
TYPE: PRF
ORGANISM: Homo sapiens
US-09-822-485-2

Query Match 56.3%; Score 431; DB 10; Length 170;
Best Local Similarity 54.7%; Pred. No. 5e-40;
Matches 76; Conservative 33; Mismatches 30; Indels 0; Gaps 0;

QY 3 RSYNHLQGVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAIN 62
DB 31 RSYPHLEGDVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAIN 90
QY 63 SNYIYAMKKKKKLYGSKFNNDCLEKRIEENGNTYASFNMONGROMYVALNGKAPR 122
DB 91 SGFYVAMNRKRLYGSRLTYVDCRFERIEENGNTYASQRMWRROGPMFLALDRGGR 150
QY 123 RGQTRKNTSAHFLPMV 141
DB 151 PGRTRRYHLSAHFLPLV 169

RESULT 12

US-09-750-963-2
Sequence 2, Application US/09750963
Patent No. US20020031805A1
GENERAL INFORMATION:
APPLICANT: Conklin, Darrell C.
TITLE OF INVENTION: NOVEL FGF HOMOLOG ZFGP10
FILE REFERENCE: 99-83
CURRENT APPLICATION NUMBER: US/09/750,963
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/173,578
PRIOR FILING DATE: 1999-12-29
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 2
LENGTH: 170
TYPE: PRF
ORGANISM: Homo sapiens
US-09-750-963-2

Query Match 56.3%; Score 431; DB 10; Length 170;
Best Local Similarity 54.7%; Pred. No. 5e-40;
Matches 76; Conservative 33; Mismatches 30; Indels 0; Gaps 0;

QY 3 RSYNHLQGVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAIN 62
DB 31 RSYPHLEGDVWVRKLFSTFKYFLKIEKNKGVSTKKNCPYSILEITSVEIGVAVKAIN 90
QY 63 SNYIYAMKKKKKLYGSKFNNDCLEKRIEENGNTYASFNMONGROMYVALNGKAPR 122
DB 91 SGFYVAMNRKRLYGSRLTYVDCRFERIEENGNTYASQRMWRROGPMFLALDRGGR 150

QY 123 RGQTRKNTSAHFLPMV 141
DB 151 PGRTRRYHLSAHFLPLV 169

RESULT 13

US-10-005-646-4
Sequence 4, Application US/10005646
Patent No. US2002015196A1
GENERAL INFORMATION:
APPLICANT: BRINGMANN, PETER W.
APPLICANT: FAULDS, DARYL
APPLICANT: MITROVIC, BRANISLAVA
APPLICANT: SRINIVASAN, SUBHA
TITLE OF INVENTION: NOVEL FIBROBLAST GROWTH FACTORS
FILE REFERENCE: BERLX 87
CURRENT APPLICATION NUMBER: US/10/005,646
CURRENT FILING DATE: 2001-12-07
PRIOR APPLICATION NUMBER: 60/251,837
PRIOR FILING DATE: 2000-12-08
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentln Ver. 2.1
SEQ ID NO 4

LENGTH: 170
TYPE: PRT
ORGANISM: Unknown Organism
FEATURE:
OTHER INFORMATION: Description of Unknown Organism: FGF-23 amino acid
US-10-005-646-4

Query Match
Best Local Similarity 56.3%; Score 431; DB 12; Length 170;
Matches 76; Conservative 33; Mismatches 30; Indels 0; Gaps 0;

OY 3 RSNHLOGDVNRKLFSTFKYFLKIEKNGKVSCTKKENCPSILETTSVEIGVAVKAIN 62
DB 31 RSPHLEGDVNRKLFSTFKYFLKIEKNGKVSCTKKENCPSILETTSVEIGVAVKAIN 90
OY 63 SNVYLAAMKKGKLYGSKFNNNDCKLERIEENGYNNTYASFNMONGROMYVALNGKAPRRG 122
DB 91 SCFYVAMNRRGRLYGSRVYSDCFRERIEENGYNNTYASRRMRHGRMPFLALDSQGIPIRG 150
OY 123 OKTRRKNTSAHFLPMVVS 141
DB 151 PGGRTRRYHLSAHFLPLVVS 169

RESULT 14
US-09-822-485-32
Sequence 33, Application US/09822485
Patent No. US20020001825A1
GENERAL INFORMATION:
APPLICANT: Itoh, No. US20020001825A1yuyuki
TITLE OF INVENTION: No. US20020001825A1el Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 08035.0001-01000
CURRENT APPLICATION NUMBER: US/09/822,485
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 33
LENGTH: 140
TYPE: PRT
ORGANISM: Mus sp.
US-09-822-485-33

Query Match
Best Local Similarity 56.2%; Score 430; DB 10; Length 140;
Matches 74; Conservative 34; Mismatches 31; Indels 0; Gaps 0;

OY 5 YNHLOGDVNRKLFSTFKYFLKIEKNGKVSCTKKENCPSILETTSVEIGVAVKAINSN 64
DB 2 YPHLEGDVNRKLFSTFKYFLKIEKNGKVSCTKKENCPSILETTSVEIGVAVKAINSG 61
OY 65 YLAAMKKGKLYGSKFNNNDCKLERIEENGYNNTYASFNMONGROMYVALNGKAPRRG 124
DB 62 FYVAMNRRGRLYGSRVYSDCFRERIEENGYNNTYASRRMRHGRMPFLALDSQGIPIRG 121
OY 125 OKTRRKNTSAHFLPMVVS 143
DB 122 RTRRRHQLSTHFLPLVVS 140

RESULT 15
US-09-822-485-32
Sequence 32, Application US/09822485
Patent No. US20020001825A1
GENERAL INFORMATION:
APPLICANT: Itoh, No. US20020001825A1yuyuki
TITLE OF INVENTION: No. US20020001825A1el Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 08035.0001-01000
CURRENT APPLICATION NUMBER: US/09/822,485
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 32

LENGTH: 162
TYPE: PRT
ORGANISM: Mus sp.
US-09-822-485-32

Query Match
Best Local Similarity 56.2%; Score 430; DB 10; Length 162;
Matches 74; Conservative 34; Mismatches 31; Indels 0; Gaps 0;

OY 5 YNHLOGDVNRKLFSTFKYFLKIEKNGKVSCTKKENCPSILETTSVEIGVAVKAINSN 64
DB 24 YPHLEGDVNRKLFSTFKYFLKIEKNGKVSCTKKENCPSILETTSVEIGVAVKAINSG 83
OY 65 YLAAMKKGKLYGSKFNNNDCKLERIEENGYNNTYASFNMONGROMYVALNGKAPRRG 124
DB 84 FYVAMNRRGRLYGSRVYSDCFRERIEENGYNNTYASRRMRHGRMPFLALDSQGIPIRG 143
OY 125 OKTRRKNTSAHFLPMVVS 143
DB 144 RTRRRHQLSTHFLPLVVS 162

Search completed: November 18, 2002, 16:11:08
Job time : 11 secs



GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 18, 2002, 16:05:52 ; Search time 17 Seconds

(without alignments)
808.660 Million cell updates/sec

Title: US-09-284-100a-2_copy_66_208

Perfect score: 765

Sequence: 1 HVRSYNHLOGQVRRKRKLFSE.....GQTRRNTSAHFLPMVHVS 143

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: 1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	429.5	56.1	194	2	S49501
2	427.5	55.9	194	1	A36301
3	424.5	55.5	194	2	I48610
4	420.5	55.0	194	2	S26049
5	369	48.2	256	2	JC4627
6	363	47.5	220	2	I50588
7	358	46.8	237	1	S39582
8	352.5	46.1	245	1	TVWST2
9	341.5	44.6	239	1	S04742
10	326	42.6	208	2	S66486
11	326	42.6	208	2	A48137
12	319	41.7	207	2	JC5941
13	315	41.2	207	2	JC5940
14	304	39.7	208	2	JC7082
15	303	39.6	211	2	JC7353
16	302	39.5	212	2	JC7511
17	301	39.3	97	2	B46289
18	297	38.8	98	2	C46289
19	269	35.2	96	2	D46289
20	265.5	34.7	267	1	TVHUF5
21	262.5	34.3	264	2	A36207
22	262.5	34.3	266	2	S68144
23	249.5	32.6	192	2	S54407
24	248.5	32.5	187	2	S23595
25	241.5	31.6	208	2	S14192
26	239.5	31.3	208	2	S21012
27	239	31.2	168	2	JG0184
28	236.5	30.9	194	2	I50710
29	203	26.5	146	1	S00185

30	203	26.5	154	2	A31674	basic fibroblast g
31	203	26.5	154	2	C37360	basic fibroblast g
32	203	26.5	157	1	GKBOB	basic fibroblast g
33	203	26.5	210	2	A32398	basic fibroblast g
34	202	26.4	155	1	A33665	acidic fibroblast
35	201	26.3	413	2	H88481	protein let-756 (l
36	200	26.1	155	2	S04147	acidic fibroblast
37	200	26.1	155	2	D37360	acidic fibroblast
38	198	25.9	155	1	A60721	acidic fibroblast
39	198	25.9	164	2	S31622	acidic fibroblast g
40	197	25.8	152	2	GKBOA	acidic fibroblast
41	196	25.6	152	2	JH0476	acidic fibroblast
42	196	25.6	155	2	JM0055	acidic fibroblast
43	195.5	25.6	206	1	TVHUS	acidic fibroblast
44	195	25.5	189	2	A48834	basic fibroblast g
45	194	25.4	155	2	A60130	acidic fibroblast

ALIGNMENTS

RESULT 1

S49501

keratinocyte growth factor - sheep

C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)

C:Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 16-Jul-1999

C:Accession: S49501

R:Mitcheil, J.E.A.; McInnes, C.J.

submitted to the EMBL Data Library, October 1994

A:Reference number: S49501

A:Accession: S49501

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-194 <MIT>

A:Cross-references: EMBL:Z46236; NID:9559503; PID:CAA86306.1; PID:9559504

C:Superfamily: fibroblast growth factor

Query Match 56.1% Score 429.5; DB 2; Length 194;
Best Local Similarity 54.2% Pred. No. 2.1e-33;
Matches 77; Conservative 30; Mismatches 34; Indels 1; Gaps 1;

QY	1	HVRSYNHLO-GDVRRKRKLFSTFKYFKLEKNGKYSGRKKENCPSILEITSVEIGVAVK 59
DB	52	HTRSYDMEGDDIRVRRLFCRTQWLRIDKRGKVGQEMKNNINMEIRTVAVGVAIK 111
QY	60	AINSYVYIAMMKKGIYSGKEFNNDCKLERIEENGNTYASFNMQHNGROMYVALGKG 149
DB	112	GVESEYVYIAMMKKEKLYAKKCEDCNKELLLENHNTYASAKWTHSGGEMFVALNSKG 171
QY	120	APRRGQTRRRNTSAHFLPMV 141
DB	172	VPVRGKTKRKKEKTAHFLPMAL 193

RESULT 2

A36301
fibroblast growth factor 7 precursor [validated] - human
N:Alternate names: keratinocyte growth factor

C:Species: Homo sapiens (man)

C:Date: 28-Mar-1991 #sequence_revision 07-Jul-1995 #text_change 08-Dec-2000

C:Accession: A36301; A31453; A46289; I51958

R:Finch, P.W.; Rubin, J.S.; Miki, T.; Ron, D.; Aaronson, S.A.

Science 245, 752-755, 1989

A:Title: Human KGF is FGF-related with properties of a paracrine effector of epithelial

A:Reference number: A36301; MUID:89368897; PMID:2475908

A:Accession: A36301

A:Molecule type: mRNA

A:Residues: 1-194 <FIN>

A:Cross-references: GB:M60828; NID:q186738; PIDN:AAA63210.1; PID:q186739; GB:M25295

R:Rubin, J.S.; Osada, H.; Finch, P.W.; Taylor, W.G.; Rudikoff, S.; Aaronson, S.A.

Proc. Natl. Acad. Sci. U.S.A. 86, 802-806, 1989

A:Title: Purification and characterization of a newly identified growth factor specif

A:Reference number: A31453; MUID:89128865; PMID:2915979
A:Accession: A31453
A:Molecule type: protein
A:Residues: 7'..33-44 <RUB>
A:Experimental source: embryonic lung cell fibroblast line MA26
R:Kelley, M.J.; Peck, M.; Sestanovic, H.N.; Rubin, J.S.; O'Brien, S.J.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 89, 9287-9291, 1992
A>Title: Emergence of the keratinocyte growth factor multigene family during the great
A:Reference number: A46289; MUID:93028449; PMID:1409637
A:Accession: A46289
A:Molecule type: DNA
A:Residues: 97-194 <REL>
A>Note: sequence extracted from NCBI backbone (NCBIN:115887, NCBIR:115889)
R:Aaronson, S.A.; Bottaro, D.P.; Miki, T.; Ron, D.; Fitch, P.W.; Fleming, T.P.; Ahn, J.
Ann. N.Y. Acad. Sci. 638, 62-77, 1991
A>Title: Keratinocyte growth factor: A fibroblast growth factor family member with unusual
A:Reference number: I51958; MUID:92152720; PMID:1664700
A:Accession: I51958
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-194 <AA>
A:Cross-references: GR:S81661; NID:g245438; PIDN:ABR2143L.1; PID:g245439
C:Genetics:
A:Gene: GDB:F67
A:Cross-references: GDB:I31444; OMIM:148180
A:Map position: I5q13-I5q22
A>Note: the human genome contains about 16, intron-containing, partial copies of this gene
C:Superfamily: fibroblastic protein; growth factor; heparin binding; mitogen
C:Keywords: extracellular protein; growth factor; status predicted <SIG>
F:32-194/Product: fibroblast growth factor 7 #status experimental <MAT>

Query Match 55.9%; Score 427.5; DB 1; Length 194;
Best Local Similarity 54.2%; Pred. No. 6,3e-33;
Matches 77; Conservative 30; Mismatches 34; Indels 1; Gaps 1;

OY 1 HRVSNHLD-GDVVRKRIEFSTFYKLTEKNKYSGTKENCPYSILLETISVEIGVAVK 59
| | | | : | | | | | : | | | | : | | | | | | | | | | : | | | | : | | | |
Db 52 HTRSVDWEGDIFRKRLFCRTQWLRLDRKKGVAGTDEMKNNINMETFTVAVGIVAIAIK 111

OY 60 AINSNYIAMNKKGKLYSKSEPNNDCKLERIEINGVTAVASFNMQHNGROMYALNAKG 119
| : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 112 GVSEFFYLAKMKEGLYLAKKEDCNFKELLENHYNTVASAKWTGHNCGEFAVALNOKG 171

OY 120 APRROCTRRKRNTSAHLPLPVV 141
| | | | | : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 172 IFVRCGRKTTRKRGKAHPMALPMAI 193

RESULT 3

I48610
keratinocyte growth factor Fgf-7 - mouse
C:Species: Mus musculus (house mouse)
C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
A:Accession: I48610; S33227
R:Masom, I.J.; Fuller-Pace, F.; Smith, R.; Dickson, C.
Mech. Dev. 45, 15-30, 1994
A>Title: FGF-7 (keratinocyte growth factor) expression during mouse development suggests
A:Reference number: I48610; MUID:94242659; PMID:8186145
A:Accession: I48610
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-194 <RBS>
A:Cross-references: EMBL:Z22703; NID:g297755; PIDN:CAA80403.1; PID:g297756
C:Superfamily: fibroblast growth factor

Query Match 55.5%; Score 424.5; DB 2; Length 194;
Best Local Similarity 53.5%; Pred. No. 6,3e-33;
Matches 76; Conservative 31; Mismatches 34; Indels 1; Gaps 1;

OY 1 HRVSNIHD-GDVMRKLFESTFYKLTEKNKYSGTKENCPYSILEITTSVEIGVAIVK 59
| | | | : | | | | | : | | | | : | | | | | | | | | | : | | | | : | | | |
Db 52 HTRSVDWEGDIFRKRLFCRTQWLRLDRKKGVAGTDEMKNNINMETFTVAVGIVAIAIK 111

```

QY      60  AINSNYIYLAAMNKKGLYSKSEFNNDCKLKERLEENGNYTYSFNMQHGROMYALNKG 119
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      112  GVESEYIYLAAMNKEGLYAKKKECNECNEKLEILENNHYNTYASAKWTHSGGEMFALNKG 171

QY      120  APRRGQKTRKRKNTSAHPLPMVY 141
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      172  LPVKGKTKRKKEQKTAHFLPMAL 193

RESULT 4
S26049
fibroblast growth factor 7 precursor - rat
N:Alternate names: keratinocyte growth factor
C:Species: Rattus norvegicus (Norway rat)
C:Date: 19-Mar-1998 #sequence_revision 19-Mar-1998 #text_change 16-Jul-1999
A:Accession: S26049
R:Yan, G.; Nikolopoulos, S.; Wang, F.; McKeahan, W.L.
In Vitro Cell. Dev. Biol. 27, 437-438, 1991
A>Title: Sequence of rat keratinocyte growth factor (heparin-binding growth factor ty
A:Accession: S26049
A:Molecule type: mRNA
A:Residues: 1-194 <YAN>
A:Cross-references: EMBL:X56551
R:Yan, G.
submitted to the EMBL Data Library, February 1991
A:Reference number: S78446
A:Accession: S78446
A:Molecule type: mRNA
A:Residues: 1-16, 'P', 18-100, 'M', 102-123, 'Q', 125-150, 'S', 152-194 <YAN>
A:Cross-references: EMBL:X56551, NID:56707, PIDN:CA43892.1, PID:956708
C:Superfamily: Fibroblast growth factor
C:Keywords: extracellular protein; growth factor; heparin binding; mitogen
E:1-31/Domain: signal sequence #status predicted <SIG>
E:32-194/Product: fibroblast growth factor 7 #status predicted <MAT>

Query Match          55.0%; Score 420.5; DB 2; Length 194;
Best Local Similarity 52.8%; Pred. No. 1.5e-32;
Matches 75; Conservative 32; Mismatches 34; Indels 1; Gaps 1;

QY      1  HVRSYVNHIO-GVPMRRIKLFSPKTYFLKLEKNGKVSCTKKNCPYSILFISVEIGVAVK 59
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      52  HTRSDYDEGGDTRIRRLFCFRQWYLRIDRKSGKVGCTOEMNNSYNIMKTRIVANGYAIK 111

QY      60  AINSNYIYLAAMNKKGLYSKSEFNNDCKLKERLEENGNYTYSFNMQHGROMYALNKG 119
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      112  GVESEYIYLAAMNKEGLYAKKKECNECNEKLEILENNHYNTYASAKWTHSGGEMFALNKG 171

QY      120  APRRGQKTRKRKNTSAHPLPMVY 141
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      172  LPVKGKTKRKKEQKTAHFLPMAL 193

RESULT 5
JC4627
fibroblast growth factor 3 - zebra fish
C:Species: Brachydanio rerio (zebra fish)
C:Date: 10-May-1996 #sequence_revision 13-Jul-1996 #text_change 16-Jul-1999
A:Accession: JC4627
R:Kiefer, P.; Strehle, U.; Dickson, C.
Gene 168, 211-215, 1996
A>Title: The zebrafish Fgf-3 gene: cDNA sequence, transcript structure and genomic or
A:Reference number: JC4627; MUID:96194899; PMID:8654946
A:Accession: JC4627
A:Molecule type: mRNA
A:Residues: 1-256 <KIE>
A:Cross-references: EMBL:Z48714, NID:9971333, PIDN:CA488596.1, PID:9971334
A:Experimental source: embryo
A:Note: The authors translated the codon TGG for residue 178 as His
A:Comment: This factor belongs to the fibroblast growth factor family which have the
protein is a cell signalling molecule and the roles during the early stages of de
C:Genetics:

```


QY 120 APRRGQTKRKNTSAHFLPMVV 141

Db 113 LYIGMERGELYGSKLTRECVFREOFEEENWNTYASTLYKHSDSEROYYVALNKDGS PR 17

Db 113 LYIGMERGELYGSKLTRECVFREOFEEENWNTYASTLYKHSDSEROYYVALNKDGS PR 17

QY	123	RGQTRRKNTSAHFLPMV	141
		: :	
Db	173	EGYRTKRHOKTFHFLPRV	191

RESULT 13

UC5940 fibroblast growth factor 16 - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 21-Jul-2000
C:Accession: J05940
R: Miyake, A.; Konishi, M.; Martin, F.H.; Hernday, N.A.; Ozaki, K.; Yamamoto, S.; Mikami, Biochem. Biophys. Res. Commun. 243, 148-152, 1998
A:Title: Structure and expression of a novel member, FGF-16, of the fibroblast growth factor family
A:Reference number: J05940; MUID:98139883; PMID:9473496
A:Accession: J05940
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-207 <Miy>
Cross-references: DDBJ:AB002561; NID:g2911149; PIDD:BAA4947.1; PFD:g2911150
Superfamily: fibroblast growth factor

Query Match	41.2%	Score 315;	DB 2;	Length 207;
Best Local Similarity	42.4%	Pred. No. 1.6e-22;		
Matches 59;	Conservative 34;	Mismatches 44;	Indels 2;	Gaps 1;

[illegible]

RESULT 14

JC7082
 fibroblast somatotropin-20 - African clawed frog
 N:Alternate names: fibroblast growth factor-20
 C:Species: *Xenopus laevis* (African clawed frog)
 C:Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 21-Jul-2000
 C:Accession: JC7082
 R:Koga, C.; Adelt, N.; Nakata, K.; Mikoshiba, K.; Furuhata, Y.; Sato, S.; Tel, H.; Sakai
 M:Title: Characterization of a novel member of the FGF family, xFGF-20, in *Xenopus laevis*
 M:Biochem. Biophys. Res. Commun. 261, 756-765, 1999
 Reference number: JC7082; MUID:99373151; PMID:10441498

Query Match	39.7%	Score 304;	DB 2;	Length 208;
Best Local Similarly	42.0%	Pred. No. 1.8e-21;		
Match 58; Conservative	35;	Mismatches 43;	Indels 2;	Gaps 1;

[illegible]

RESULT 15
JC7353

Query Match 39.6%; Score 303; DB 2; Length 211;
Best Local Similarity 42.3%; Pred. No. 2.3e-21;
Matches 58; Conservative 33; Mismatches 44; Indels 2; Gaps 1;

[illegible]

Search completed: November 18, 2002, 16:08:08
Job time : 18 secs



GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 18, 2002, 15:58:17 ; Search time 12 Seconds

(without alignments)
494.260 Million cell updates/sec

Title: US-09-284-100a-2_COPY_66_208

Sequence: 1 HVRSTYNNHLOGDVRMRKLFSE.....GCKTRKNTSAHFLPMVYHS 143

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Minimum number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	765	100.0	208	1	FGFA_HUMAN
2	765	100.0	215	1	FGFA_RAT
3	729	95.3	209	1	FGFM_MOUSE
4	435	56.9	162	1	FGFM_MOUSE
5	431	56.3	170	1	FGFM_HUMAN
6	429.5	56.1	194	1	FGF7_SHEEP
7	428.5	55.9	194	1	FGF7_CANFA
8	427.5	55.9	194	1	FGF7_HUMAN
9	424.5	55.5	194	1	FGF7_MOUSE
10	418.5	54.7	194	1	FGF7_MOUSE
11	411.5	53.8	194	1	FGF7_PIG
12	369	48.2	256	1	FGF3_BRARE
13	363	47.5	220	1	FGF3_CHICK
14	358	46.8	237	1	FGF3_XENLA
15	352.5	46.1	245	1	FGF3_MOUSE
16	341.5	44.6	239	1	FGF3_HUMAN
17	336	42.6	208	1	FGF9_HUMAN
18	336	42.6	208	1	FGF9_MOUSE
19	336	42.6	208	1	FGF9_RAT
20	319	41.7	207	1	FGF9_HUMAN
21	315	41.2	207	1	FGF9_HUMAN
22	309	40.4	209	1	FGF9_RAT
23	303	39.6	211	1	FGF9_XENLA
24	265.5	34.7	268	1	FGF5_HUMAN
25	262.5	34.3	264	1	FGF5_MOUSE
26	262.5	34.3	266	1	FGF5_RAT
27	249.5	32.6	192	1	FGFR_XENLA
28	248.5	32.5	187	1	FGFR_XENLA
29	248	32.4	245	1	FGFR_MOUSE
30	245	32.0	245	1	FGFR_MOUSE
31	241.5	31.6	245	1	FGFR_HUMAN
32	241	31.5	243	1	FGFR_MOUSE
33	239.5	31.3	208	1	FGFR_HUMAN

34	236.5	30.9	194	1	FGF4_CHICK	P4804_gallus_gall
35	214	28.0	247	1	FGFE_HUMAN	O92915_homo_sapien
36	213	27.8	247	1	FGFE_MOUSE	P70379_mus_musculu
37	204	26.7	225	1	FGFB_HUMAN	O92914_homo_sapien
38	203	26.5	154	1	FGF2_MOUSE	P15653_mus_musculu
39	203	26.5	154	1	FGF2_RAT	P13109_rattus_norv
40	203	26.5	155	1	FGF2_BOVIN	P03969_bos_taurus
41	203	26.5	155	1	FGF2_HUMAN	P09038_homo_sapien
42	203	26.5	155	1	FGF2_SHEEP	P20003_ovis_aries
43	202	26.4	155	1	FGF2_HUMAN	P05230_homo_sapien
44	201	26.3	225	1	FGFB_MOUSE	P70378_mus_musculu
45	201	26.3	425	1	L756_CAEBL	Q11184_caenorhabdi

ALIGNMENTS

```

RESULT 1
FGFA_HUMAN
ID FGFA_HUMAN STANDARD; PRT; 208 AA.
AC O15520;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Fibroblast growth factor-10 precursor (FGF-10) (Keratinocyte growth
DE factor 2).
GN FGF10.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP TISSUE=Lung.
RC SEQUENCE FROM N.A.
RX MEDLINE=97435285; PubMed=9287324;
RA Emoto H., Tagashira S., Mattei M.-G., Yamasaki M., Hashimoto G.,
RA Katsunuma T., Negro T., Nakatsuka M., Birnbaum D., Coulter F.,
RA Itoh N.;
RT *Structure and expression of human fibroblast growth factor-10.*;
RL J. Biol. Chem. 272:23191-23194(1997).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung.
RX Jhenev P.A., Gruber J.R., Liu B., Feng P., Florence C., Blunt A.,
RA Huddleston K.A., Teliska M., Alfonso P., Coleman T.A., Ornitz D.M.,
RA Dillon P.A., Duan R.D.;
RT *Cutaneous wound healing by keratinocyte growth factor 2.*;
RL Submitted (JUL-1997) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: COULD BE A GROWTH FACTOR ACTIVE IN THE PROCESS OF WOUND
CC HEALING. ACTS AS A MITOGEN IN THE LUNG. MAY ACT IN A MANNER
CC SIMILAR TO FGF-7.
CC -!- SUBCELLULAR LOCATION: Secreted (Potential).
CC -!- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
CC
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CC
CC -----
CC EMBL: AB002097; BAA22331.1; -
CC EMBL: U67918; AAB61991.1; -
CC HSSP: P31371; 1682.
CC Genew: HGNC:3666; FGF10.
CC MIM: 602115; -
CC InterPro: IPR002209; HB/F-growthfact.
CC InterPro: IPR002348; IL1_HBGF.
CC Pfam: PF00167; FGF_1.
CC PRINTS: PR00262; IL1HBGF.
CC Prodom: PD000831; HB/F-growthfact; 1.
CC SMART: SM00442; FGF_1.

```

DR PROSITE; PS00247; HBGF_FGF; 1.
 KW Growth factor: Glycoprotein; Signal.
 FT SIGNAL 1 37 POTENTIAL.
 FT CHAIN 38 208 FIBROBLAST GROWTH FACTOR-10.
 FT DOMAIN 52 62 POLY-SER.
 FT CARBOHYD 51 51 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 196 196 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SO SEQUENCE 208 AA; 23436 MW; C0A0705C108680B3 CRC64;

Query Match
 Best local Similarity 100.0%; Score 765; DB 1; Length 208;
 Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVASVNHGQDVNRKLFSTKFKLEKNGKVSCTKKNCPSTLEITSVETGVAVKA 60
 DB 66 HVASVNHGQDVNRKLFSTKFKLEKNGKVSCTKKNCPSTLEITSVETGVAVKA 125
 QY 61 INSNYVLAMNKKGLYSGKEFNNDCKLKERIEENGVTYASFNMQHNQMYVALNGKA 120
 DB 126 INSNYVLAMNKKGLYSGKEFNNDCKLKERIEENGVTYASFNMQHNQMYVALNGKA 185
 QY 121 PRGQKTRRKNTSAHFLPMVVS 143
 DB 186 PRGQKTRRKNTSAHFLPMVVS 208

RESULT 2
 FGFA_RAT STANDARD; PRT; 215 AA.

ID FGFA_RAT
 AC P70492;
 DT 15-JUL-1999 (Rel. 38, Created)
 DT 15-JUL-1999 (Rel. 38, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Fibroblast growth factor-10 precursor (FGF-10).
 GN FGF10.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=WiStar;
 RX MEDLINE=96279129; PubMed=8663172;
 RA Yamasaki M., Miyake A., Tagashira S., Itoh N.;
 RT "Structure and expression of the rat mRNA encoding a novel member of
 the fibroblast growth factor family.";
 RL J. Biol. Chem. 271:15918-15921(1996).
 CC -1- FUNCTION: COULD BE A GROWTH FACTOR ACTIVE IN THE PROCESS OF WOUND
 HEALING. ACTS AS A MITOGEN IN THE LUNG. MAY ACT IN A MANNER
 SIMILAR TO FGF-7.
 CC -1- SUBCELLULAR LOCATION: Secreted (Potential).
 CC -1- TISSUE SPECIFICITY: PREFERENTIALLY EXPRESSED IN THE LUNG IN
 ADULTS.
 CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
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 or send an email to license@isb-sib.ch).

DR EMBL; D79215; BAA11468.1; -;
 DR HSSP; P31371; IG82.
 DR InterPro; IPR002209; HB/F_growthfact.
 DR InterPro; IPR002348; IIL_HBGF.
 DR Pfam; PF00167; FGF; 1.
 DR PRINTS; PR00262; IILHBGF.
 DR PRODOM; PD000831; HB/F_growthfact; 1.
 DR SMART; SM00442; FGF; 1.
 DR PROSITE; PS00247; HBGF_FGF; 1.
 KW Growth factor; Glycoprotein; Signal.

FT SIGNAL 1 36 POTENTIAL.
 FT CHAIN 37 215 FIBROBLAST GROWTH FACTOR-10.
 FT DOMAIN 51 69 POLY-SER.
 FT CARBOHYD 50 50 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 203 203 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SO SEQUENCE 215 AA; 24029 MW; 93778EFA6FC0866A CRC64;

Query Match
 Best local Similarity 100.0%; Score 765; DB 1; Length 215;
 Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVASVNHGQDVNRKLFSTKFKLEKNGKVSCTKKNCPSTLEITSVETGVAVKA 60
 DB 73 HVASVNHGQDVNRKLFSTKFKLEKNGKVSCTKKNCPSTLEITSVETGVAVKA 132
 QY 61 INSNYVLAMNKKGLYSGKEFNNDCKLKERIEENGVTYASFNMQHNQMYVALNGKA 120
 DB 133 INSNYVLAMNKKGLYSGKEFNNDCKLKERIEENGVTYASFNMQHNQMYVALNGKA 192
 QY 121 PRGQKTRRKNTSAHFLPMVVS 143
 DB 193 PRGQKTRRKNTSAHFLPMVVS 215

RESULT 3
 FGFA_MOUSE STANDARD; PRT; 209 AA.

ID FGFA_MOUSE
 AC O35565;
 DT 15-JUL-1999 (Rel. 38, Created)
 DT 15-JUL-1999 (Rel. 38, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Fibroblast growth factor-10 precursor (FGF-10) (keratinocyte growth
 factor 2).
 GN FGF10.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=97473538; PubMed=9332392;
 RA Tagashira S., Harada H., Katsumata T., Itoh N., Nakatsuka M.;
 RT "Cloning of mouse FGF10 and up-regulation of its gene expression
 during wound healing.";
 RL Gene 197:399-404(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Lung;
 RA Duan D.R., Florence C.;
 RT Submitted (MAR-1997) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: COULD BE A GROWTH FACTOR ACTIVE IN THE PROCESS OF WOUND
 HEALING. ACTS AS A MITOGEN IN THE LUNG. MAY ACT IN A MANNER
 SIMILAR TO FGF-7.
 CC -1- SUBCELLULAR LOCATION: Secreted (Potential).
 CC -1- TISSUE SPECIFICITY: EXPRESSED ABUNDANTLY IN EMBRYOS AND THE LUNG,
 AND AT MUCH LOWER LEVELS IN BRAIN AND HEART.
 CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
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DR EMBL; D89080; BAA22836.1; -;
 DR HSSP; U94517; AAD00761.1; -;
 DR HSSP; P31371; IG82.
 DR MGD; MGI:1099809; Fgf10.
 DR InterPro; IPR002209; HB/F_growthfact.
 DR InterPro; IPR002348; IIL_HBGF.
 DR Pfam; PF00167; FGF; 1.

```

DR PRINTS: PR00262; ILIHBGF.
DR PRODOM: PD000831; HB/F-growthfact: 1.
DR SMART: SM00442; FGF: 1.
DR PROSITE: PS00247; HBGF_FGF: 1.
KW Growth factor; Glycoprotein; Signal.
FT SIGNAL 1 36
FT CHAIN 1 36
FT DOMAIN 37 209 FIBROBLAST GROWTH FACTOR-10.
FT CAROHD 52 63 POLY-SER.
FT CAROHD 50 50 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CAROHD 197 197 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 209 AA; 23597 MW; 7FD22227BF4943CC CMC64;

Query Match
Best Local Similarity 95.3%; Score 729; DB 1; Length 209;
Matches 134; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 1 HVRSYNLQGVWRMRKLEFPTKRYFLKIEKNKVGSTKKNCPYSILETTSEIGVAVKA 60
DB 67 HVRSYNLQGVWRMRRLPSSFTKRYFLTKKNGKVGSTKKNEDCPYSILETTSEIGVAVKA 126
61 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKGA 120
127 INSNTYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKGA 186
DB 121 PRGOKTRKNTSAHFLPMVYHS 143
QY 187 PRGOKTRKNTSAHFLPMVYHS 209

RESULT 4
FGFM_MOUSE
ID FGFM_MOUSE STANDARD; PRT; 162 AA.
AC Q9ESS2;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Fibroblast growth factor-22 precursor (FGF-22).
GN FGF22.
OS Mus musculus (Mouse).
OC Eukaryota; Chordata; Cranialata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-21240339; PubMed-11342227;
RA Nakatake Y., Hoshikawa M., Asaki T., Kassai Y., Itoh N.;
RT "Identification of a novel fibroblast growth factor, FGF-22, preferentially expressed in the inner root sheath of the hair follicle.";
RL Biochim. Biophys. Acta 1517:460-463(2001).
CC -1- FUNCTION: MAY BE INVOLVED IN HAIR DEVELOPMENT.
CC -1- SUBCELLULAR LOCATION: Secreted (Potential).
CC -1- TISSUE SPECIFICITY: PREPARENTIAL EXPRESSED IN SKIN. LOW EXPRESSION IN BRAIN. EXPRESSED IN THE INNER ROOT SHEATH OF THE HAIR FOLLICLE.
CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
CC -----
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CC -----
DR EMBL: AB036765; BAB16407.1; -
DR HSSP: P31371; IG82.
DR MGD: MGI:1914362; Fgf22.
DR InterPro: IPR002209; HB/F-growthfact.
DR InterPro: IPR002348; ILI_HBGF.
DR Pfam: PF00167; FGF_1.
DR PRINTS: PR00262; ILIHBGF.
DR PRODOM: PD000831; HB/F-growthfact: 1.
DR SMART: SM00442; FGF: 1.
DR PRODOM: PD000831; HB/F-growthfact: 1.
DR SMART: SM00442; FGF: 1.

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DR PROSITE: PS00247; HBGF_FGF: 1.
KW Growth factor; Signal.
FT SIGNAL 1 22
FT CHAIN 23 162 FIBROBLAST GROWTH FACTOR-22.
SQ SEQUENCE 162 AA; 18927 MW; 225E512F4E1BE29 CRC64;

Query Match
Best Local Similarity 56.9%; Score 435; DB 1; Length 162;
Matches 75; Conservative 33; Mismatches 31; Indels 0; Gaps 0;

QY 5 YNLQGVWRMRKLEFPTKRYFLKIEKNKVGSTKKNCPYSILETTSEIGVAVKA 64
DB 24 YNLQGVWRMRRLPSSFTKRYFLKIEKNKVGSTKKNEDCPYSILETTSEIGVAVKA 83
QY 65 YLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFNMOHNGROMYVALNGKGA 124
DB 84 FYVAMNRRGLYSGRYSVDCRRERIEENGNTYASRRWRHGRPMFLALDSOGIPRG 143
QY 125 OKTRKNTSAHFLPMVYHS 143
DB 144 KRIRRHQLSTHFLPYVSS 162

RESULT 5
FGFM_HUMAN
ID FGFM_HUMAN STANDARD; PRT; 170 AA.
AC Q9HCT0;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Fibroblast growth factor-22 precursor (FGF-22).
GN FGF22.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Cranialata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-21240339; PubMed-11342227;
RA Nakatake Y., Hoshikawa M., Asaki T., Kassai Y., Itoh N.;
RT "Identification of a novel fibroblast growth factor, FGF-22, preferentially expressed in the inner root sheath of the hair follicle.";
RL Biochim. Biophys. Acta 1517:460-463(2001).
CC -1- FUNCTION: MAY BE INVOLVED IN HAIR DEVELOPMENT.
CC -1- SUBCELLULAR LOCATION: Secreted (Potential).
CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
CC -----
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CC -----
DR EMBL: AB021925; BAB13479.1; -
DR HSSP: P31371; IG82.
DR Genew: HGNC:3679; FGF22.
DR MIM: 605831; -
DR InterPro: IPR002209; HB/F-growthfact.
DR InterPro: IPR002348; ILI_HBGF.
DR Pfam: PF00167; FGF_1.
DR PRINTS: PR00262; ILIHBGF.
DR PRODOM: PD000831; HB/F-growthfact: 1.
DR SMART: SM00442; FGF: 1.
DR PROSITE: PS00247; HBGF_FGF; FALSE_NEG.
KW Growth factor; Signal.
FT SIGNAL 1 22
FT CHAIN 23 170 FIBROBLAST GROWTH FACTOR-22.
SQ SEQUENCE 170 AA; 19662 MW; CB8918C2D54AC7 CRC64;

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RESULT 8
FGF7_HUMAN
ID FGF7_HUMAN STANDARD: PRT; 194 AA.
AC P21781;
DT 01-MAY-1991 (Rel. 18, Created)
DT 01-MAY-1991 (Rel. 18, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE keratinocyte growth factor precursor (KGF) (fibroblast growth factor-
DE 7) (HGF-7).
OS Homo sapiens (human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxId=9606;
RN [1]
RP SEQUENCE FROM N.A., AND SEQUENCE OF 32-50.
RA MEDLINE=89368897; PubMed=2475908;
RA Finch P.W., Rubin J.S., Miki T., Ron D., Aaronson S.A.;
RA "Human KGF is FGF-related with properties of a paracrine effector of
RA epithelial cell growth."
RA Science 245:752-755(1989).
RN [2]
RP SEQUENCE FROM N.A.
RA MEDLINE=92152720; PubMed=1664700;
RA Aaronson S.A., Bottaro D.P., Miki T., Ron D., Finch P.W.,
RA Fleming T.P., Ahn J., Taylor W.G., Rubin J.S.;
RA "keratinocyte growth factor. A fibroblast growth factor family member
RA with unusual target cell specificity."
RA Ann. N.Y. Acad. Sci. 638:62-77(1991).
RN [3]
RP SEQUENCE OF 32-44.
RA MEDLINE=89128865; PubMed=2915979;
RA Rubin J.S., Osada H., Finch P.W., Taylor W.G., Rudikoff S.,
RA Aaronson S.A.;
RA "Purification and characterization of a newly identified growth
RA factor specific for epithelial cells."
RA Proc. Natl. Acad. Sci. U.S.A. 86:802-806(1989).
RN [4]
RP FUNCTION: GROWTH FACTOR ACTIVE ON KERATINOCYTES. POSSIBLE
RP MAJOR PARACRINE EFFECTOR OF NORMAL EPITHELIAL CELL PROLIFERATION.
RN [5]
RP TISSUE SPECIFICITY: Secreted.
RN [6]
RP SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
RN [7]
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RN or send an email to license@isb-sib.ch).
CC CC
CC EMBL, M60828; AAA63210.1; -
CC DR EMBL, S81661; AAB21431.1; -
CC DR PIR, A31453; A31453.
CC DR PIR, A36301; A36301.
CC DR HSSP, P31371; 1G82.
CC DR Genew, HGNC:3685; FGF7.
CC MIM, 148180; -
CC DR InterPro; IPR002209; HB/F-growthfact.
CC DR InterPro; IPR002348; IL1_HBGF.
CC DR Pfam; PF00167; FGF_1.
CC DR PRINTS; PRO0262; IL1HBGF.
CC DR ProDom; PD000831; HB/F-growthfact; 1.
CC DR SMART; SM00442; FGF_1.
CC DR PROSITE; PS00247; HBGF_FGF_1.
CC KM Growth factor; Mitogen; Signal.
CC FT SIGNAL 1 31
CC FT CHAIN 32 194 KERATINOCYTE GROWTH FACTOR.
CC FT CARBOHYD 45 45 N-LINKED (GLYCAC...) (POTENTIAL).
SQ SEQUENCE 194 AA; 22509 MW; B19192474E6049E2 CRC64;
Query Match 55.94; Score 427.5; DB 1; Length 194;

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Best Local Similarity 54.2%; Pred. No. 1e-33;
Matches 77: Conservative 30; Mismatches 34; Indels 1; Gaps 1

Qy      1 HVRVYNHIO-GDVWRKILFTSTKFLKLEKNKGSGTKKENCPYSILETTSVEIGVAVK 59
        |||.....|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db      52 HTRSDIVWEGGDIVRRRLCEPTOWYLRIDKGGKVGOEMKNMNNYIMEITVAAGIAIK 111
        |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy      60 AINSNYLANMKRKKGLVSGKEFNNDCKLKERIEENGNTYASFWMONGMYVALNQG 119
        |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db      112 GVSEFYLAMNKEGKLVAKKCNEDCNFKELLEHNHTYASAKWTNGEMFVALNQG 171
        |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy      120 APRGQCTRRKRNTSAHFPLPMV 141
        |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db      172 IPRGKRTKEQKTAFHLPMAI 193
        |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 9
FGF7_MOUSE
ID FGF7_MOUSE STANDARD; PRT; 194 AA.
AC P36363:
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DI 01-NOV-1997 (Rel. 35, last annotation update)
DE Keratinocyte growth factor precursor (KGF) (Fibroblast growth factor-
DE 7) (GCG-7) (HBGF-7).
GS FGF7 OR FGF-7.
SN Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxId=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE-94242659; PubMed=8186145;
RX Mason I.J., Fuller-Pace F., Smith R., Dickson C.;
RT "FGF-7 (Keratinocyte growth factor) expression during mouse
RT development suggests roles in myogenesis, forebrain regionalisation
RT and epithelial-mesenchymal interactions.";
RN Mech. Dev. 45:15-30(1994).
[2]
RN SEQUENCE FROM N.A.
RC STRAIN=FVB/N;
RA Jones M.L., Dato M.E., Greenberg J.M.;
RU Submitted (May-1996) to the EMBL/Genbank/DDBJ databases.
CC -!- FUNCTION: GROWTH FACTOR ACTIVE ON KERATINOCYTES. POSSIBLE
CC MAJOR PARACRINE EFFECTOR OF NORMAL EPITHELIAL CELL PROLIFERATION.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
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-----
DR EMBL: Z22703; CAAB0403.1; -.
DR EMBL: U58503; AAB01343.1; -.
DR PIR: S33227; S33227.
DR HSSEF; P31371; iG82.
DR MGD; MG1:95521; PgI7.
DR InterPro: IPR002209; HB/F_growthfact.
DR InterPro: IPR002348; IL1_HBGF.
DR Pfam: PF00167; FGF_1.
DR PRINTS: PR00262; TLtHBGF.
DR ProDom: PD000831; HB/F_growthfact; 1.
DR SMART: SM00442; FGF; 1.
DR PROSITE: PS00247; HBGF_FGF; 1.
KW Growth factor; Mitogen; Signal.
FT SIGNAL 1 31
FT CHAIN 32 194 BY SIMILARITY.
FT CARBOHYD 45 45 KERATINOCYTE GROWTH FACTOR.
SEQUENCE 194 AA. 22347 MW. 8.00 kDa. (POTENTIAL).

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QY 120 APRGOKTRBKNTSAHFLPMVY 141
DB 172 LEVKGKTKRKOKTAHFLPMXI 193

RESULT 12
FGF3_BRAVE STANDARD: PRT: 256 AA.
ID FGF3_BRAVE STANDARD: PRT: 256 AA.
AC P48602;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last annotation update)
DE Fibroblast growth factor-3 precursor (FGF-3) (HBGF-3).
GN FGF3 OR FGF-3.
OS Brachydanio rerio (Zebrafish) (Danio rerio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OC NCBI_TaxID=7955;
[1]
SEQUENCE FROM N.A.
MEDLINE=96204005; PubMed=8622866;
Kiefer P., Strahle U., Mason I., Dickson C.;
"Secretion and mitogenic activity of zebrafish FGF3 reveal
intermediate and mitogenic relative to mouse and Xenopus homologues.";
Oncogene 12:1503-1511(1996).
CC -1- FUNCTION: POTENT MITOGEN AND TRANSFORMING AGENT (BY SIMILARITY).
CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
CC
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AC P48601;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Fibroblast growth factor-3 precursor (FGF-3) (HBGF-3).
GN FGF3 OR FGF-3.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OC NCBI_TaxID=9031;
[1]
SEQUENCE FROM N.A.
STRAIN=Rhode Island red; TISSUE=Embryo;
MEDLINE=95309122; PubMed=7789270;
Mahmood R., Kiefer P., Guthrie S., Dickson C., Mason I.;
"Multiple roles for FGF-3 during cranial neural development in the
chicken.";
Development 121:1399-1410(1995).
CC -1- FUNCTION: POTENT MITOGEN AND TRANSFORMING AGENT (BY SIMILARITY).
CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
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OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_TaxID=8355;
RN [1]
RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
RA MEDLINE=94038898; PubMed=8223431;
RT Kiefer P., Mathieu M., Close J.M., Peters G., Dickson C.;
RL "FGF3 from Xenopus laevis.";
RN EMBO J. 12:4159-4168(1993).
RP [2]
RP SEQUENCE OF 39-137 FROM N.A.
RC TISSUE=Neurula;
RX MEDLINE=93048831; PubMed=1425349;
RA Tannahill D., Isaacs H.V., Close M.J., Peters G., Slack J.M.W.;
RT "Developmental expression of the Xenopus int-2 (FGF-3) gene;
RL activation by mesodermal and neural induction.";
RN Development 115:695-702(1992).
CC -1- FUNCTION: POTENT MITOGEN AND TRANSFORMING AGENT.
CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
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CC or send an email to license@isb-sib.ch).
-----
DR EMBL: Z25539; CAA60987.1;
DR EMBL: X65237; CAA46341.1;
DR PIR: S39582; S39582;
DR PIR: S25713; S25713;
DR HSSP: P31371; 1G82;
DR InterPro: IPR002209; HB/F-growthfact.
DR InterPro: IPR002348; IIL_HBGF.
DR Pfam: PF00167; FGF; 1
DR PRINTS: PR00262; IILHBGF.
DR PRODOM: PD000831; HB/F-growthfact; 1.
DR SMART: SM00442; FGF; 1.
DR PROSITE: PS00247; HBGF_FGF; 1.
KW Growth factor; Mitogen; Signal; glycoprotein.
FT SIGNAL 1 21
FT CHAIN 1 22 237 FIBROBLAST GROWTH FACTOR-3.
FT CARBOHYD 83 83 N-LINKED (GLCNAC...).
SQ SEQUENCE 237 AA; 26984 MW; EDD31B0893567A2D CRC64;
-----
Query Match 46.8%; Score 358; DB 1; Length 237;
Best Local Similarity 49.7%; Pred. No. 5.2e-27;
Matches 74; Conservative 26; Mismatches 37; Indels 12; Gaps 2;
-----
OY 5 YNHLOGDVNRKRLSFYFKLIERKNGVSGTKKENCPSYSLITISVEIGVAVKAINSN 64
DB 54 YEHGAGARRRKLKCATKYHLQHLNGKINGTLEKNSVFLIETAVDVIAIKGLFSG 113
OY 65 YLLAMNKKGLKYSKEFNNDCKLKERIEENGNYTAS--FMWONG-----ROMY 112
DB 114 RYLLAMNNGRLYASEYINPECEFEVERIHELGYNTASRLYRTVPSGATRRKASAEELMY 173
OY 113 VALNGKAPRRGQKTRRKNTSAHFLPMV 141
DB 174 VSINGKRRPRRGKTRTKRQKSLFLPRVL 202
-----
RESULT 15
FGF3_MOUSE
ID FGF3_MOUSE STANDARD; PRT: 245 AA.
AC P05524;
DT 01-NOV-1988 (Rel. 09, Created)
DT 01-NOV-1988 (Rel. 09, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE INT-2 proto-oncogene protein precursor (Fibroblast growth factor-3)
DE (FGF-3) (HBGF-3).
DE FGF3 OR FGF-3 OR INT-2.

```

```

OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Cranialata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=86247582; PubMed=3015624;
RA Moore R., Casey G., Brookes S., Dixon M., Peters G., Dickson C.;
RT "Sequence, topography and protein coding potential of mouse int-2: a
RL putative oncogene activated by mouse mammary tumour virus.";
RN EMBO J. 5:919-924(1986).
RP [2]
RP SEQUENCE OF 1-73 FROM N.A.
RX MEDLINE=88296404; PubMed=2841106;
RA Smith R., Peters G., Dickson C.;
RT "Multiple RNAs expressed from the int-2 gene in mouse embryonal
RL carcinoma cell lines encode a protein with homology to fibroblast
RT growth factors.";
RN EMBO J. 7:1013-1022(1988).
RP [3]
RP CHARACTERIZATION.
RX MEDLINE=91193291; PubMed=1964588;
RA Dickson C., Acland P., Smith R., Dixon M., Deed R., McAllan D.,
RA Walther W., Fuller-Pace F., Kiefer P., Peters G.;
RT "Characterization of int-2: a member of the fibroblast growth factor
RT family.";
RN J. Cell Sci. Suppl. 13:87-96(1990).
CC -1- FUNCTION: COULD BE INVOLVED IN EAR DEVELOPMENT.
CC -1- INDUCTION: BY INTEGRATION OF MOUSE MAMMARY TUMOR VIRUS.
CC -1- SIMILARITY: BELONGS TO THE HEPARIN-BINDING GROWTH FACTORS FAMILY.
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CC or send an email to license@isb-sib.ch).
-----
DR EMBL: Y00848; CAA68767.1;
DR PIR: A23930; TVMST2.
DR HSSP: P09038; 1BFG.
DR MGI: G1:95517; Fgf3.
DR InterPro: IPR002209; HB/F-growthfact.
DR InterPro: IPR002348; IIL_HBGF.
DR Pfam: PF00167; FGF; 1.
DR PRINTS: PR00262; IILHBGF.
DR PRODOM: PD000831; HB/F-growthfact; 1.
DR SMART: SM00442; FGF; 1.
DR PROSITE: PS00247; HBGF_FGF; 1.
KW Proto-oncogene; Growth factor; Mitogen; Signal; glycoprotein.
FT SIGNAL 1 17
FT CHAIN 1 18 245 INT-2 PROTO-ONCOGENE PROTEIN.
FT CARBOHYD 65 65 N-LINKED (GLCNAC...).
SQ SEQUENCE 245 AA; 27214 MW; 70D94FD6A783C79 CRC64;
-----
Query Match 46.1%; Score 352.5; DB 1; Length 245;
Best Local Similarity 51.0%; Pred. No. 1.8e-26;
Matches 76; Conservative 22; Mismatches 38; Indels 13; Gaps 3;
-----
OY 5 YNHLOGDVNRKRLSFYFKLIERKNGVSGTKKENCPSYSLITISVEIGVAVKAINSN 64
DB 36 YEHGAGARRRKLKCATKYHLQHLPSGRVNGS--LNSAVSILLETAVGVAAIKGLFSG 94
OY 65 YLLAMNKKGLKYSKEFNNDCKLKERIEENGNYTAS--FMWONG-----ROMY 112
DB 95 RYLLAMNKKGLKYSADYHNAPECEFEVERIHELGYNTASRLYRTGSSGPGAGQPGAGQRPWY 154
OY 113 VALNGKAPRRGQKTRRKNTSAHFLPMV 141
DB 155 VSINGKRRPRRGKTRTKRQKSLFLPRVL 183

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Tue Nov 19 11:09:07 2002

Search completed: November 18, 2002, 16:06:46
job time : 13 secs

us-09-284-100a-2_copy_66_208.rsp



GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 18, 2002, 16:05:12 ; Search time 30 seconds
(without alignments)
982.158 Million cell updates/sec

Title: US-09-284-100a-2_COPY_66_208
Perfect score: 765
Sequence: 1 HVRSYNIHLOGDVWRKRLFSF.....GOKTKRKNNTSAHFLPMVHS 143

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues
Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: SPREMBL_21.*
2: SP_archaea.*
3: SP_bacteria.*
4: SP_fungi.*
5: SP_human.*
6: SP_invertebrate.*
7: SP_mammal.*
8: SP_mmc.*
9: SP_organelle.*
10: SP_plant.*
11: SP_rodent.*
12: SP_virus.*
13: SP_vertebrate.*
14: SP_unclassified.*
15: SP_virus.*
16: SP_bacteriophage.*
17: SP_archaeop.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	765	100.0	208	6	Q95K97
2	755	98.7	208	4	Q96P59
3	749.5	98.0	213	6	Q9N1B9
4	681	89.0	212	13	Q42407
5	560	73.2	201	13	Q80G59
6	497	65.0	111	13	Q90Y71
7	483	63.1	134	13	Q90XQ3
8	480	62.7	112	13	Q90XQ3
9	437	57.1	162	11	Q8V179
10	391.5	51.2	186	6	Q95147
11	386.5	50.5	185	11	Q9ERN5
12	353.5	46.2	245	11	Q8R5L9
13	327	42.7	208	6	Q95112
14	319	41.7	207	11	Q9ER05
15	312	40.8	207	11	Q9ESL8
16	309	40.4	129	4	Q60371

17	305	39.9	212	11	Q9ESL9	Q9ES19 mus musculus
18	304	39.7	208	13	Q9PXY1	Q9PXY1 xenopus lae
19	302	39.5	212	11	Q9EST9	Q9EST9 rat mus mus
20	281.5	36.8	97	4	Q9NSU0	Q9NSU0 homo sapien
21	256.5	33.5	191	13	Q9DFC9	Q9DFC9 brachydanio
22	251	32.8	192	11	Q9ERW3	Q9ERW3 rat mus mus
23	251	32.8	199	13	Q9ERW3	Q9ERW3 rat mus mus
24	251	32.8	245	13	Q9W6A2	Q9W6A2 gallus gall
25	248	32.4	245	11	Q8VCY9	Q8VCY9 mus musculus
26	245.5	32.1	196	13	Q9YH31	Q9YH31 notophthalm
27	244.5	32.0	124	13	Q90XQ3	Q90XQ3 ambystoma m
28	244	31.9	181	13	Q9A17	Q9A17 gallus gall
29	244	31.9	181	13	Q9A17	Q9A17 gallus gall
30	242	31.6	127	4	Q956A1	Q956A1 homo sapien
31	241	31.5	181	11	Q8T8G5	Q8T8G5 homo sapien
32	241	31.5	181	11	Q924B4	Q924B4 rat mus mus
33	241	31.5	302	11	Q9CSX5	Q9CSX5 mus musculus
34	240.5	31.4	208	11	Q8R5L5	Q8R5L5 rat mus mus
35	238	31.1	73	6	Q97573	Q97573 sus scrofa
36	238	31.1	301	5	Q8T8A3	Q8T8A3 ciona savig
37	235.5	30.8	206	13	Q9YGD8	Q9YGD8 oncorhynch
38	235	30.7	153	6	Q8S073	Q8S073 canis famli
39	222.5	29.1	111	13	Q90XQ1	Q90XQ1 ambystoma m
40	215	28.1	155	13	Q80FR9	Q80FR9 fuqua tubrip
41	213	27.8	211	11	Q8R4X0	Q8R4X0 rat mus mus
42	213	27.8	211	11	Q8R5L7	Q8R5L7 rat mus mus
43	212	27.8	252	11	Q89096	Q89096 rat mus mus
44	212	27.7	237	13	Q91A16	Q91A16 gallus gall
45	212	27.7	253	13	Q91A15	Q91A15 gallus gall

ALIGNMENTS

RESULT 1	Q95K97	PRELIMINARY;	PRT;	208 AA.
ID	Q95K97	01-DEC-2001 (TREMBLrel. 19, Created)		
AC	Q95K97	01-DEC-2001 (TREMBLrel. 19, Last sequence update)		
DT	01-DEC-2001	(TREMBLrel. 21, Last annotation update)		
DE	01-JUN-2002 (TREMBLrel. 21, Last annotation update)			
OS	Hypothetical 23.5 kDa protein.			
OC	Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).			
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;			
OC	Cercopithecoidea; Macaca.			
OX	NCBI_TaxID=9541;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=MEDULLA OBLONGATA;			
RA	Osada N., Hida M., Kusuda J., Tanuma R., Iseki K., Hirai M., Terao K.,			
RA	Suzuki Y., Sugano S., Hashimoto K.;			
RT	"Isolation of full-length cDNA clones from macaque brain cDNA			
RT	libraries."			
RL	Submitted (JUN-2001) to the EMBL/GenBank/DBJ databases.			
DR	EMBL: AB063051; BAB60779.1;			
DR	InterPro: IPR002209; HB/F_growthfact.			
DR	Pfam: PF00167; FGF_1.			
DR	ProDom: PD000831; HB/F_growthfact; 1.			
DR	PROSITE: PS00247; HBGF_FGF; UNKNOWN_1.			
KW	Hypothetical protein			
SC	SEQUENCE 208 AA; 23466 MW; 0766A787609B3661 CRC64;			

Query Match 100.0%; Score 765; DB 6; Length 208;
Best Local Similarity 100.0%; Pred. No. 5.1e-61;
Matches 143; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HVRSYNIHLOGDVWRKRLFSFTKYFLKTEKNGVSGTKKENCPSYLETTSVEIGVAVKA 60
DB 66 HVRSYNIHLOGDVWRKRLFSFTKYFLKTEKNGVSGTKKENCPSYLETTSVEIGVAVKA 125
QY 61 INSNYLANMKKGLYSKEFNNDCKLKERIEENGYNYPASPMQHNCRQVYVLANKGA 120
|||||

080G59 ID PRELIMINARY: PRT: 201 AA.
 AC 080G59.
 DT 01-JUN-2002 (TREMBlrel. 21, Created)
 DT 01-JUN-2002 (TREMBlrel. 21, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Fibroblast growth factor 10.
 OS Ambystoma mexicanum (Axolotl).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae;
 OC Ambystoma.
 OX NCBI_TaxID=8296;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21826199; PubMed=11836784;
 RA Christensen R.N., Weinstein M., Tassava R.A.;
 RT "Expression of fibroblast growth factors 4, 8, and 10 in limbs,
 flanks, and blastemas of Ambystoma.";
 RL Dev. Dyn. 223:193-203(2002).
 EMBL: AY034453; AAK59700.1;
 SEQUENCE 201 AA; 22994 MW; 89EA1E61806A6F57 CRC64;

Query Match 73.2%; Score 560; DB 13; Length 201;
 Best Local Similarity 70.7%; Pred. No. 1,2e-42;
 Matches 99; Conservative 22; Mismatches 19; Indels 0; Gaps 0;

OY 2 VRSYHHOGDVRMRKLFSTFYFKIEKNGVSGTKKENCPSILETTSVEIGVAVAKAI 61
 DB 56 VRSYHHOGDVRMRKLFSTFYFKIEKNGVSGTKKENCPSILETTSVEIGVAVAKAI 115
 OY 62 NSNYLLAMNKGKLYGSKFENNDCKLERIEENGNTYASFPMOHNGROMYVALNGKAP 121
 DB 116 NSNYLLAMNKGKLYGSKFENNDCKLERIEENGNTYASFPMOHNGROMYVALNGKAP 175
 OY 122 RRGOKTRRKNTSAHFLPVV 141
 DB 176 RRGOKTRRKNTSAHFLPVV 195

RESULT 6

090Y71

PRELIMINARY: PRT: 111 AA.

ID 090Y71
 AC 090Y71;
 DT 01-DEC-2001 (TREMBlrel. 19, Created)
 DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Fibroblast growth factor-10 (Fragment).
 OS Xenopus laevis (African clawed frog).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipridae; Pipidae;
 OC Xenopodidae; Xenopus.
 OX NCBI_TaxID=8355;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Yokoyama H., Yonel-Tamura S.;
 RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20143688; PubMed=10677252;
 RA Yokoyama H., Yonel-Tamura S., Endo T., Izpisua Belmonte J., Tamura K.,
 Ide H.;
 RT "Mesenchyme with fgf-10 expression is responsible for regenerative
 capacity in Xenopus limb buds.";
 RL Dev. Biol. 219:18-29(2000).
 DR EMBL: AB073747; BAB71729.1;
 DR InterPro: IPR002209; HB/F-growthfact.
 DR Pfam: PF00167; FGF. 1.
 DR ProDom: PD000831; HB/F-growthfact; 1.
 DR PROSITE: PS00247; HBGF_FGF; UNKNOWNM_1.
 DR NON_TER 1
 FT NON_TER 111
 SO SEQUENCE 111 AA; 12827 MW; 79656CA53BD60D1 CRC64;

Query Match 65.0%; Score 497; DB 13; Length 111;
 Best Local Similarity 82.9%; Pred. No. 2.8e-37;
 Matches 92; Conservative 12; Mismatches 7; Indels 0; Gaps 0;

OY 5 YNHLGQDVRMRKLFSTFYFKIEKNGVSGTKKENCPSILETTSVEIGVAVAKAINSN 64
 DB 1 YNHLGQDVRMRKLFSTFYFKIEKNGVSGTKKENCPSILETTSVEIGVAVAKAINSN 60
 OY 65 YLLAMNKGKLYGSKFENNDCKLERIEENGNTYASFPMOHNGROMYVAL 115
 DB 61 YLLAMNKGKLYGSKFENNDCKLERIEENGNTYASFPMOHNGROMYVAL 111

RESULT 7

090X03

PRELIMINARY: PRT: 134 AA.

ID 090X03
 AC 090X03;
 DT 01-DEC-2001 (TREMBlrel. 19, Created)
 DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Fibroblast growth factor 10 (Fragment).
 OS Ambystoma mexicanum (Axolotl).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae;
 OC Ambystoma.
 OX NCBI_TaxID=8296;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21439472; PubMed=11555861;
 RA Christensen R.N., Weinstein M., Tassava R.A.;
 RT "Fibroblast growth factors in regenerating limbs of Ambystoma: Cloning
 and semi-quantitative RT-PCR expression studies.";
 RL J. Exp. Zool. 290:529-540(2001).
 EMBL: AF360986; AAL16959.1;
 DR InterPro: IPR002209; HB/F-growthfact.
 DR Pfam: PF00167; FGF. 1.
 DR ProDom: PD000831; HB/F-growthfact; 1.
 DR NON_TER 1
 FT NON_TER 134
 SO SEQUENCE 134 AA; 15317 MW; 678E26418972CBAE CRC64;

Query Match 63.1%; Score 483; DB 13; Length 134;
 Best Local Similarity 69.1%; Pred. No. 6.1e-36;
 Matches 85; Conservative 20; Mismatches 18; Indels 0; Gaps 0;

OY 2 VRSYHHOGDVRMRKLFSTFYFKIEKNGVSGTKKENCPSILETTSVEIGVAVAKAI 61
 DB 12 VRSYHHOGDVRMRKLFSTFYFKIEKNGVSGTKKENCPSILETTSVEIGVAVAKAI 71
 OY 62 NSNYLLAMNKGKLYGSKFENNDCKLERIEENGNTYASFPMOHNGROMYVALNGKAP 121
 DB 72 NSNYLLAMNKGKLYGSKFENNDCKLERIEENGNTYASFPMOHNGROMYVALNGKAP 131
 OY 122 RRG 124
 DB 132 RRG 134

RESULT 8

090XP9

PRELIMINARY: PRT: 112 AA.

ID 090XP9
 AC 090XP9;
 DT 01-DEC-2001 (TREMBlrel. 19, Created)
 DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Fibroblast growth factor 10 (Fragment).
 OS Ambystoma maculatum (Spotted Salamander).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae;
 OC Ambystoma.
 OX NCBI_TaxID=43114;
 RN [1]

SEQUENCE FROM N.A.
 ID MEDLINE-21439472; PubMed-11555861;
 RA Christensen R.N., Weinstein M., Tassava R.A.;
 RT "Fibroblast growth factors in regenerating limbs of Ambystoma: Cloning
 and semi-quantitative RT-PCR expression studies."
 RL J. Exp. Zool. 290:529-540(2001).
 DR EMBL: AF360990; AAL16963.1;
 DR InterPro: IPR002209; HB/F_growthfact.
 DR Pfam: PF00167; FGF.1.
 DR ProDom: PD000831; HB/F_growthfact; 1.
 DR NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 112 AA; 1286 MW; F5D8EC6B13C479C9 CRC64;

Query Match 62.7%; Score 480; DB 13; Length 112;
 Best Local Similarity 75.0%; Pred. No. 9.3e-36;
 Matches 84; Conservative 17; Mismatches 11; Indels 0; Gaps 0;

QY 28 EKNGVSGTKREKNCYPSLEITVSIGVAVAKINSNYLLAMNKGKGLYSKEFNNDCKL 87
 1 EKNGVSGTKKDCYSVMEITSVDGIVAVKGYVSNYLLAMNEKGRVYSGREFTTCKL 60
 QY 88 KRRIENGNTYASFNMOHNGROMVALNGCAPRGOKTKRKNTSAHFLPM 139
 61 KERMEKNYNTYASYKMRKOROMVALNGKGTGRKGTNRKNTSAHFLPM 112
 DB

RESULT 9
 QY 08VI79 PRELIMINARY; PRT; 162 AA.

AC 08VI79;
 DT 01-MAR-2002 (TREMBLrel. 20, Created)
 DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Fibroblast growth factor 22.
 GN FGF22.
 OS Rattus norvegicus (rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Itoh N;
 RT "Rattus norvegicus FGF21."
 RT Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AB078902; BAB84300.1;
 DR InterPro: IPR002209; HB/F_growthfact.
 DR Pfam: PF00167; FGF.1.
 DR PRINTS: PR00262; IL1_HBGF.
 DR ProDom: PD000831; HB/F_growthfact; 1.
 DR SMART: SM00442; FGF.1.
 DR PROSITE: PS00247; HBGF_FGF; UNKNOWN_1.
 SO SEQUENCE 162 AA; 18961 MW; 3100F25D105F5ED3 CRC64;

Query Match 57.1%; Score 437; DB 11; Length 162;
 Best Local Similarity 54.0%; Pred. No. 1e-31; 30; Indels 0; Gaps 0;
 Matches 75; Conservative 34; Mismatches 30; Indels 0; Gaps 0;
 QY 5 YNHLGADVWRKLESTFKYFLKIEKNKGVSGTKREKNCYPSLEITVSIGVAVAKINSN 64
 24 YPHLEDVWRRLFSSTHFLRVDPGRGVGRWRHGGDSIVKRSVRGVAVIAVYSG 83
 DB 65 YVLAAMKKGKLSKFEFNNDCKLERIENGNTYASFNMOHNGROMVALNGKCAPRG 124
 84 FYVAMNRGLYSRVYSDCRRERIEENGNTYASRMRHRRHGRMPALDSOGIPRG 143
 QY 125 QKTRKNTSAHFLPMYVHS 143
 144 KRTRHOLSTHFLPLVSS 162
 DB

RESULT 10

095L47
 ID 095L47 PRELIMINARY; PRT; 186 AA.

AC 095L47;
 DT 01-DEC-2001 (TREMBLrel. 19, Created)
 DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Keratinocyte growth factor FGF-7 (fragment).
 OS Mustela vison (American mink).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Mustelidae; Mustelinae;
 OC Mustela.
 OX NCBI_TaxID=9667;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Billingsley J.T., Rose W.;
 RT "Keratinocyte growth factor expression in mink (Mustela vison) skin
 during natural and artificially induced winter fur growth."
 RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AF420232; AAL16059.1;
 DR InterPro: IPR002209; HB/F_growthfact.
 DR Pfam: PF00167; FGF.1.
 DR ProDom: PD000831; HB/F_growthfact; 1.
 DR PROSITE: PS00247; HBGF_FGF; UNKNOWN_1.
 DR NON_TER 186
 FT NON_TER 186
 SO SEQUENCE 186 AA; 21618 MW; A17ACA0409802C68 CRC64;

Query Match 51.2%; Score 391.5; DB 6; Length 186;
 Best Local Similarity 54.2%; Pred. No. 1.4e-27;
 Matches 71; Conservative 28; Mismatches 31; Indels 1; Gaps 1;

QY 1 HRSYNIHQ-GDVWRKLESTFKYFLKIEKNKGVSGTKREKNCYPSLEITVSIGVAVANK 59
 52 HRSYDYMEGGDIRVRLFCRTQWYLRIDRGVKGTQEKNSYNIMETRYAVGVIAIK 111
 DB 60 AINSNYLLAMNKGKGLYSKEFNNDCKLERIENGNTYASFNMOHNGROMVALNGK 119
 112 GVESEYLLAMNKGKGLYSKEFNNDCKLERIENGNTYASFNMOHNGROMVALNGK 171
 QY 120 APRRGOKTRK 130
 172 VPRGKTKRKE 182
 DB

RESULT 11

QY 09ERN5 PRELIMINARY; PRT; 185 AA.

AC 09ERN5;
 DT 01-MAR-2001 (TREMBLrel. 16, Created)
 DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE FGF7/KGF (Fragment).
 OS Rattus norvegicus (rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA STEVAIN-DARK AGURI;
 RA Choi J.K.W., Gibbins J.R., Hunter N., Lyons J.G., Tazawa M.Y.,
 RA Walker D.M.;
 RT "Novel CD44 splice variants associated with changes in Alternative
 Splicing of FGF-2, FGF-7, E-Cadherin and
 Shail."
 RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AF295300; AAG31597.1;
 DR HSSP: P31371; 1G82.
 DR InterPro: IPR002209; HB/F_growthfact.
 DR InterPro: IPR002348; IL1_HBGF.
 DR Pfam: PF00167; FGF.1.
 DR PRINTS: PR00262; IL1_HBGF.
 DR ProDom: PD000831; HB/F_growthfact; 1.
 DR SMART: SM00442; FGF.1.
 DR PROSITE: PS00247; HBGF_FGF.1.

FT NON_TER 185 185
 SO SEQUENCE 185 AA: 21340 MW: 8DBE8364C9222B88 CRC64;

Query Match
 Best Local Similarity 50.5%; Score 386.5; DB 11; Length 185;
 Matches 70; Conservative 28; Mismatches 31; Indels 1; Gaps 1;

QY 1 HVSYNHLO-GDVRMKLFSTFKYFLKIEKNKVSQTKKNCPSYILETSVEIGVAVK 59
 Db 52 HTSYDMEGDVRVRLCTFTQWLRIDKRGKVGTOEMRNSYIMELRTVAAGVIAIK 111

QY 60 AINSNYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGK 119
 Db 112 GVESEYLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGK 171

QY 120 APPRGOKTR 129
 Db 172 LEPKGGKTKR 181

RESULT 12

ID 09SL12 PRELIMINARY; PRT: 245 AA.

AC 09SL12; 01-JUN-2002 (TREMBlrel. 21, Created)
 DT 01-JUN-2002 (TREMBlrel. 21, Last sequence update)
 DE FGF3.

OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

RA NCBI_Taxid=10116;
 RP SEQUENCE FROM N.A.
 RT Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AB079262; BAB84564.1; -

SO SEQUENCE 245 AA; 27150 MW; C9305D307ED0648 CRC64;

Query Match
 Best Local Similarity 46.2%; Score 353.5; DB 11; Length 245;
 Matches 76; Conservative 23; Mismatches 37; Indels 13; Gaps 3;

QY 5 YNLGQDVVRMKLFSTFKYFLKIEKNKVSQTKKNCPSYILETSVEIGVAVKAINSN 64
 Db 36 YEHGAPRRRRKLYCATKYLQHPGSRVNGS-LENSAISILETTAVEGVAIKGLFSG 94

QY 65 YLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGK 112
 Db 95 KYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGK 154

QY 113 VALNGKAPRRGOKTRKNTSAHFLPMVY 141
 Db 155 VSVNGKRRPRGOKTRKNTSAHFLPMVY 183

RESULT 13
 ID 09SL12 PRELIMINARY; PRT: 208 AA.

AC 09SL12; 01-DEC-2001 (TREMBlrel. 19, Created)
 DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
 DE FGF3.

OS Sus scrofa (Pig).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.

RA NCBI_Taxid=9823;
 RP SEQUENCE FROM N.A.
 DR Paratub. V.; Silversides D.W.;

"Sus scrofa fgf9 cDNA."

RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY033825; AAK61609.2; -

DR InterPro: IPR002209; HB/F-growthfact.
 DR Pfam: PF00167; FGF. 1.
 DR ProDom: PD000831; HB/F-growthfact; 1.
 DR PROSITE: PS00247; HBGF_FGF; UNKNOWN.1.
 SO SEQUENCE 208 AA; 23454 MW; 05FDD0E2048CC5E5 CRC64;

Query Match
 Best Local Similarity 42.7%; Score 327; DB 6; Length 208;
 Matches 61; Conservative 33; Mismatches 46; Indels 2; Gaps 1;

QY 2 VRSYNHLO-GDVRMKLFSTFKYFLKIEKNKVSQTKKNCPSYILETSVEIGVAVKAI 61
 Db 51 VTDHKLKILRRDLYCTGTHLEIFPNQITQGRKDSRFLFISTAVGLVIRGV 110

QY 62 NSNYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGK 119
 Db 111 DSGLYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGK 170

QY 120 APPRGOKTRKNTSAHFLPMVY 141
 Db 171 TPEGTRKTRKNTSAHFLPMVY 192

RESULT 14
 ID 09ER05 PRELIMINARY; PRT: 207 AA.

AC 09ER05; 01-MAR-2001 (TREMBlrel. 16, Created)
 DT 01-MAR-2001 (TREMBlrel. 16, Last sequence update)
 DE FGF-16 protein.

OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

RA NCBI_Taxid=10090;
 RP SEQUENCE FROM N.A.
 RT Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF292104; AAG29501.1; -

DR HSP; P31371; 1G82.
 DR MGD; MGI:1931627; Fgf16.
 DR InterPro: IPR002209; HB/F-growthfact.
 DR InterPro: IPR002348; IL1-HBGF.

DR Pfam: PF00167; FGF. 1.
 DR PRINTS: PR00262; IL1HBGF.
 DR ProDom: PD000831; HB/F-growthfact; 1.
 DR SMART: SM00442; FGF. 1.
 DR PROSITE: PS00247; HBGF_FGF. 1.

SO SEQUENCE 207 AA; 23739 MW; E28004DED598A2C6 CRC64;

Query Match
 Best Local Similarity 41.7%; Score 319; DB 11; Length 207;
 Matches 60; Conservative 33; Mismatches 44; Indels 2; Gaps 1;

QY 5 YNLGQDVVRMKLFSTFKYFLKIEKNKVSQTKKNCPSYILETSVEIGVAVKAINSN 64
 Db 53 FAHLKILRRDLYCTGTHLEIFPNQITQGRKDSRFLFISTAVGLVIRGV 112

QY 65 YLLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGKAPR 122
 Db 113 KYLAMNKKGLYSGKEFNNDCKLERIEENGNTYASFPNQHNGROMYALNGKAPR 172

QY 123 RQOKTRKNTSAHFLPMVY 141
 Db 173 EGYTRKTRKNTSAHFLPMVY 191

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80400

From: Kemmerer, Elizabeth
Sent: Monday, November 18, 2002 12:51 PM
To: STIC-Biotech/ChemLib
Subject: seq search req

Please search amino acids 66 to 208 of SEQ ID NO: 2 for 09/284100.

Thanks,

Elizabeth (Betsy) Kemmerer
Art Unit 1646
308-2673
CM1-10B17
Mailbox: 10D19

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